

APR 16 2009

R-111-POTASH
WIPP

Split Estate

OCD-ARTESIA

Form 3160-9
(April 2004)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

5 Lease Serial No.

~~15729~~ NM-02952A

6 If Indian, Allottee or Tribe Name

7 If Unit or CA Agreement, Name and No

8 Lease Name and Well No.

James Ranch Unit #107H

9 API Well No.

30-015-37062

10 Field and Pool, or Exploratory

Quahada RidgeSE (Delaware)

11 Sec., T R M. or Blk. and Survey or Area

Sec 36, T22S, R30E, Mer NMP

12 County or Parish

Eddy Co

13 State

NM

1a. Type of work

☒ DRILL☐ REENTER

1b Type of Well

☒ Oil Well☐ Gas Well☐ Other☒ Single Zone☐ Multiple Zone

2 Name of Operator

BERCO, L.P.

/ Bobco

260737

3a Address

P. O. Box 2760
Midland, TX 79702

3b Phone No. (include area code)

432-683-2277

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

At surface SWSW, UL M, 860' FSL & 990' FWL, Lat:32.343692 Long:103.840853

At proposed prod. zone 660' FSL & 990' FWL, Sec 35, T22S-R30E, Lat:32.343181 Long:103.857081

14 Distance in miles and direction from nearest town or post office*

20 miles North East of Malaga, NM

15 Distance from proposed*
location to nearest
property or lease line, ft
(Also to nearest drg unit line, if any)

330'

16 No. of acres in lease

6406.10

17 Spacing Unit dedicated to this well

200

18 Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft

200'

19 Proposed Depth

1244'
1254' MD, 7238' (TVD)
7280 TVD MAY

20 BLM/BIA Bond No. on file

COB 000050

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

3283' GL

22 Approximate date work will start*

03/01/2009

23 Estimated duration

39 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

Annette Childers

Name (Printed/Typed)

Annette Childers

Date

2-12-09

Title

Administrative Assistant

Approved by (Signature)

/s/ Linda S. C. Rundell

Name (Printed/Typed)

/s/ Linda S. C. Rundell

Date

APR 10 2009

Title

STATE DIRECTOR

Office

NM STATE OFFICE

Application approval 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.

Conditions of approval, if any, are attached

APPROVAL FOR TWO YEARS

Title 18 USC Section 1001 and Title 43 USC 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

*(Instructions on page 2)

CARLSBAD CONTROLLED WATER BASIN

SEE ATTACHED FOR
CONDITIONS OF APPROVALAPPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED
OMB No 1004-0137
Expires July 31, 2010

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.
NM-02952A

6 If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE – Other instructions on page 2.

1 Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator
BOPCO, L. P. ATTN. GARY GERHARD

3a. Address
P O BOX 2760 midland, texas 79702

3b. Phone No. (include area code)
432-683-2277

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

8. Well Name and No.
JAMES RANCH UNIT#107H

9 API Well No.

10. Field and Pool or Exploratory Area

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
BOTTOM HOLE: 660 FSL & 990 FWL, SECTION 35, T. 22 S., R. 30 E
SURFACE HOLE: 860 FSL & 990 FWL, SECTION 36, T. 22 S., R. 30 E.

11. Country or Parish, State
EDDY

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other _____
	<input checked="" type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

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 must 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 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

AMEND ORIGINAL DRILLING RIG PLAT SIZE (SEE ATTACHMENT)

OK C.B.L. 03/19/09

14. I hereby certify that the foregoing is true and correct Name (Printed/Typed)
BARRY HUNT

Title AGENT FOR BOPCO, L. P. (SPECIAL t PERMITTING)

Signature

Date

Approved by

Title

Date

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.

CARLSBAD FIELD OFFICE

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

(Instructions on page 2)



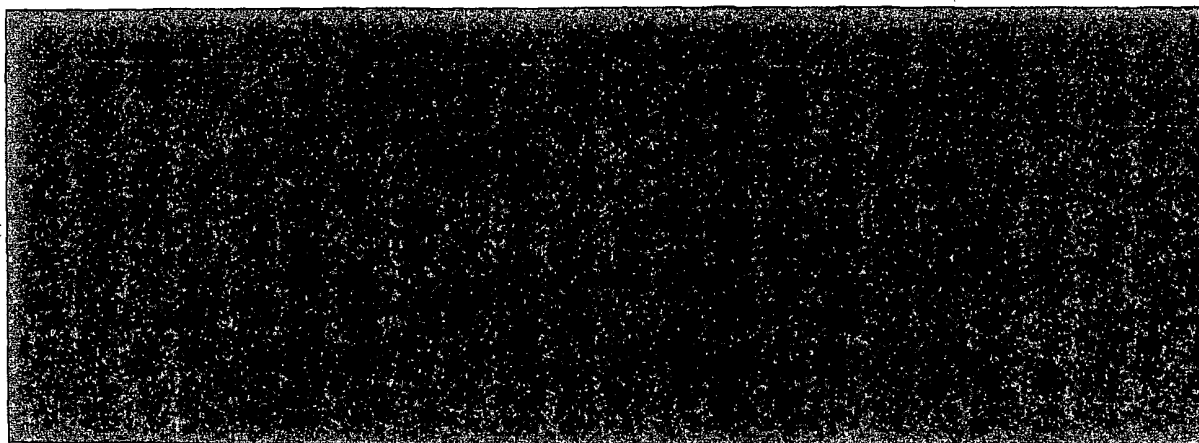
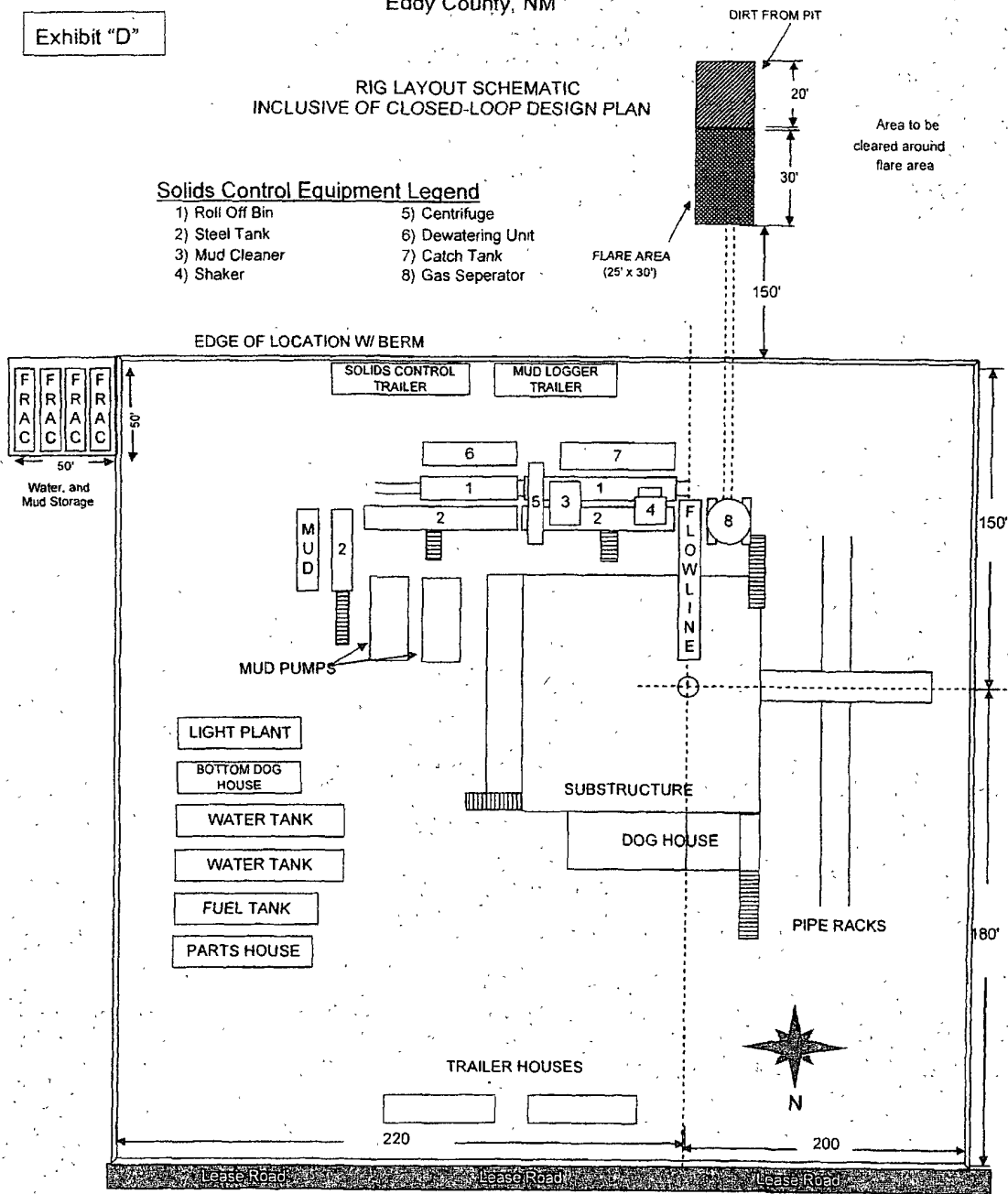
Exhibit "D"

BOPCO, L.P.
James Ranch Unit #107H
Sec 36, T22S, R30E
Eddy County, NM

RIG LAYOUT SCHEMATIC
INCLUSIVE OF CLOSED-LOOP DESIGN PLAN

Solids Control Equipment Legend

- | | |
|-----------------|--------------------|
| 1) Roll Off Bin | 5) Centrifuge |
| 2) Steel Tank | 6) Dewatering Unit |
| 3) Mud Cleaner | 7) Catch Tank |
| 4) Shaker | 8) Gas Separator |



Split Estate

OCD-ARTESIA

Form 3160-3
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No 1004-0137
Expires March 31, 2007

5 Lease Serial No. **ES229 NM02952A**
6 If Indian, Allottee or Tribe Name

1a. Type of work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		7 If Unit or CA Agreement, Name and No
1b. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		8. Lease Name and Well No. James Ranch Unit #107H
2. Name of Operator BEPCO, L. P.		9 API Well No.
3a. Address P. O. Box 2760 Midland, TX 79702	3b. Phone No. (include area code) 432-683-2277	10 Field and Pool, or Exploratory Quahada RidgeSE (Delaware)
4. Location of Well (Report location clearly and in accordance with any State requirements *) At surface SWSW, UL M, 860' FSL & 990' FWL, Lat:32.343692 Long:103.839742 At proposed prod zone SWSW, UL M, 860' FSL & 990' FWL, Sec 35, T22S-R30E, Lat:32.343731 Long:103.857083		11 Sec., T R. M. or Blk and Survey or Area Sec 36, T22S, R30E, Mer NMP
14 Distance in miles and direction from nearest town or post office* 20 miles North East of Malaga, NM		12 County or Parish
15 Distance from proposed* location to nearest property or lease line, ft (Also to nearest drng. unit line, if any) 330'	16 No. of acres in lease 6406.10	17 Spacing Unit dedicated to this well 200
18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft 200'	19 Proposed Depth 12,431' MD, 7200' (TVD)	20 BLM/BIA Bond No. on file COB 000050
21 Elevations (Show whether DF, KDB, RT, GL, etc.) 3283' GL	22 Approximate date work will start* 02/01/2009	23 Estimated duration 39 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 | 4 Bond to cover the operations unless covered by an existing bond on file (see Item 20 above) |
| 2 A Drilling Plan | 5 Operator certification |
| 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) | 6 Such other site specific information and/or plans as may be required by the authorized officer |

25 Signature Annette Childers	Name (Printed/Typed) Annette Childers	Date 12-30-08
Title Administrative Assistant		

Approved by (Signature)	Name (Printed/Typed)	Date
Title		Office

Application approval 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
Conditions of approval, if any, are attached.

Title 18 USC Section 1001 and Title 43 USC 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

*(Instructions on page 2)

BOPCO, L.P.

**P. O. Box 2760
Midland, Texas 79702**

432-683-2277

FAX-432-687-0329

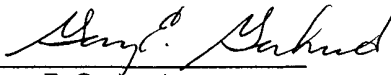
December 17, 2008

State of New Mexico Energy, Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr
Santa Fe, NM 87505

To Whom It May Concern:

BOPCO, L.P. respectfully request exception to the Prairie Chicken timing restrictions for this location - 860' FSL, 990' FWL, of Section 36, T22S, R30E, Eddy County, New Mexico.

Sincerely,



Gary E. Gerhard
Drilling Engineer

GEG/mac

OCD-ARTESIA

Form 3160-5
(April 2004)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

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.

SUBMIT IN TRIPLICATE- Other instructions on reverse side.

1 Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5 Lease Serial No E5229
2 Name of Operator BOPCO, L. P.		6 If Indian, Allottee or Tribe Name
3a Address P. O. Box 2760 Midland, TX 79702		7 If Unit or CA/Agreement, Name and/or No
3b Phone No (include area code) 432-683-2277		8 Well Name and No James Ranch Unit #107H
4 Location of Well (Footage, Sec, T, R, M, or Survey Description) SWSW, UL M, 860' FSL & 990' FWL, Sec 36, T22S, R30E, Mer NMP Lat N 32.343692, Lon W 103.839742		9 API Well No
		10 Field and Pool, or Exploratory Area Quahada Ridge SE (Delaware)
		11 County or Parish, State Eddy Co., NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other Change flowline route
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

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.)

BOPCO, L.P. respectfully requests approval to change the route of the flowline serving James Ranch Unit #107H to avoid known archeological sites. A map showing the new route is attached.

14 I hereby certify that the foregoing is true and correct Name (Printed/Typed) Annette Childers		Title Administrative Assistant
Signature		Date 1-15-09

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

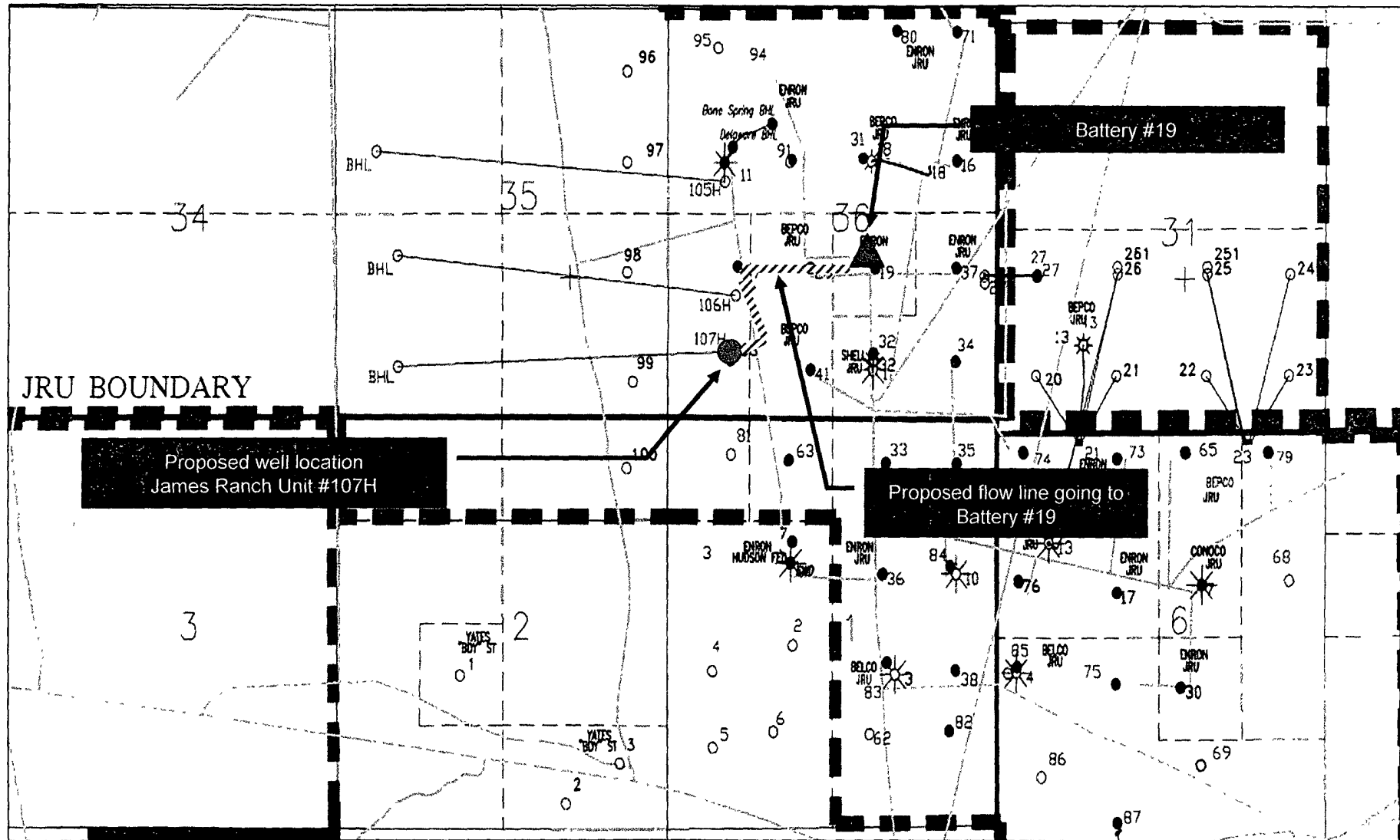
Approved by /s/ Linda S. C. Rundell	Title STATE DIRECTOR	Date APR 10 2009
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		Office NM STATE OFFICE

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(Instructions on page 2)

James Ranch Unit #107H

Exhibit "E"



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB No 1004-0137
Expires March 31, 2007**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.****SUBMIT IN TRIPLICATE- Other instructions on reverse side.**

1 Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No E5229
2. Name of Operator BOPCO, L. P.		6 If Indian, Allottee or Tribe Name
3a Address P. O. Box 2760 Midland, TX 79702	3b Phone No (include area code) 432-683-2277	7 If Unit or CA/Agreement, Name and/or No
4 Location of Well (Footage, Sec, T., R., M., or Survey Description) SWSW, UL M, 860' FSL & 990' FWL, Sec 36, T22S, R30E, Mer NMP Lat N 32.343692, Lon W 103.839742		8 Well Name and No James Ranch Unit #107H
		9. API Well No.
		10 Field and Pool, or Exploratory Area Quahada Ridge SE (Delaware)
		11 County or Parish, State Eddy Co., NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other Change Bottom Hole Location
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

- 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.)

BOPCO, L.P. respectfully requests approval of a new bottom hole location for the subject well. Original BHL was 860' FSL & 990' FWL, Sec 35, T22S, R30E. New BHL is 660' FSL & 990' FWL, Sec 35, T22S, R30E. New C-102 is attached.

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Annette Childers

Title Administrative Assistant

Signature

Annette Childers

Date

1-14-09

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

/s/ Linda S. C. Rundell

STATE DIRECTOR

Date

APR 10 2009

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

NM STATE OFFICE

Title 18 USC Section 1001 and Title 43 USC 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.

(Instructions on page 2)

1625 N. French Dr., Hobbs, NM 88240

1301 W. Grand Avenue, Artesia, NM 88210

1000 Rio Brazos Rd., Artec, NM 87410

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

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Form C-102

Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-37062	Pool Code 50443	Pool Name Quahada Ridge, SE (Delaware)
Property Code 306407	Property Name JAMES RANCH UNIT	Well Number 107H
OGRID No. 260737	Operator Name BOPCO, L.P.	Elevation 3283'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	36	22 S	30 E		860	SOUTH	990	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	35	22 S	30 E		660	SOUTH	990	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
200	N		

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

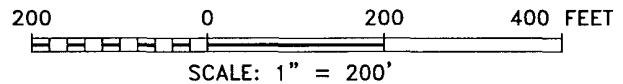
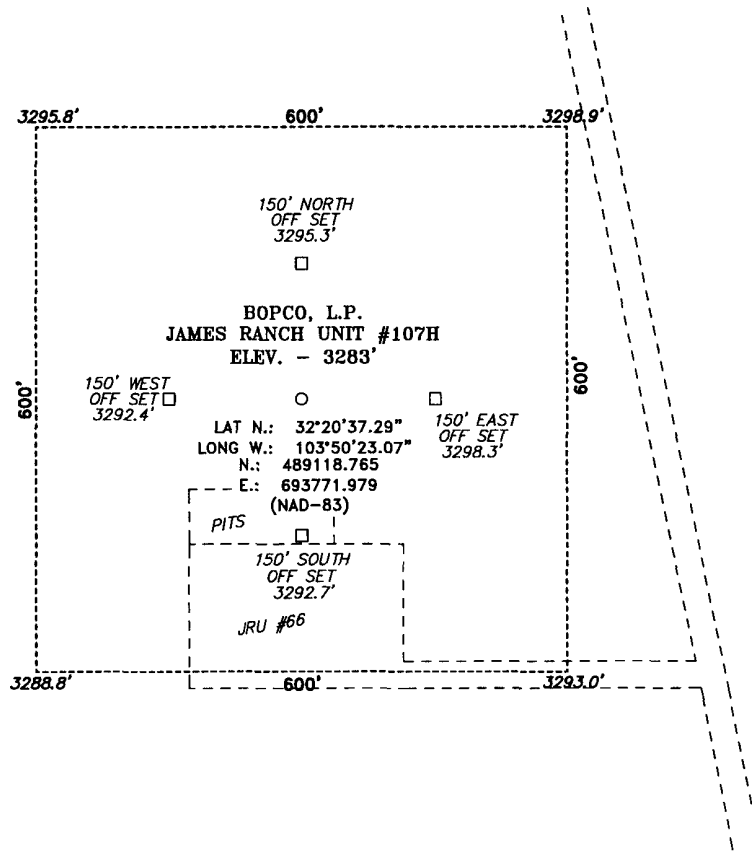
BOTTOM HOLE LOCATION
 LAT - N32°20'35.45"
 LONG - W103°51'25.49"
 SPC- N.: 488908.176
 E.: 688418.331
 (NAD-83)

SURFACE LOCATION
 LAT - N32°20'37.29"
 LONG - W103°50'23.07"
 SPC- N.: 489118.765
 E.: 693771.979
 (NAD-83)

DELAWARE ENTRY POINT
 LAT - N32°20'37.29"
 LONG - W103°50'23.07"
 SPC- N.: 489118.765
 E.: 693771.979
 (NAD-83)

SCALE - 1" = 2000'

SECTION 36, TOWNSHIP 22 SOUTH, RANGE 30 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



DIRECTIONS TO LOCATION

FROM THE JUNCTION OF STATE HWY 128 AND WIPP ROAD, GO NORTH ON WIPP ROAD 0.4 MILES TO LEASE ROAD, ON LEASE ROAD GO 0.3 WEST TO LEASE ROAD, ON LEASE ROAD GO NORTH 0.3 MILES TO LEASE ROAD, ON LEASE ROAD GO WEST 0.2 MILES TO LEASE ROAD, GO NORTH TO JRU #66 AND PROPOSED LEASE ROAD.

BOPCO, L.P.

REF: JAMES RANCH UNIT #107H / WELL PAD AND TOPO

THE JAMES RANCH UNIT #107H LOCATED 860'

FROM THE SOUTH LINE AND 990' FROM THE WEST LINE OF
SECTION 36, TOWNSHIP 22 SOUTH, RANGE 30 EAST,

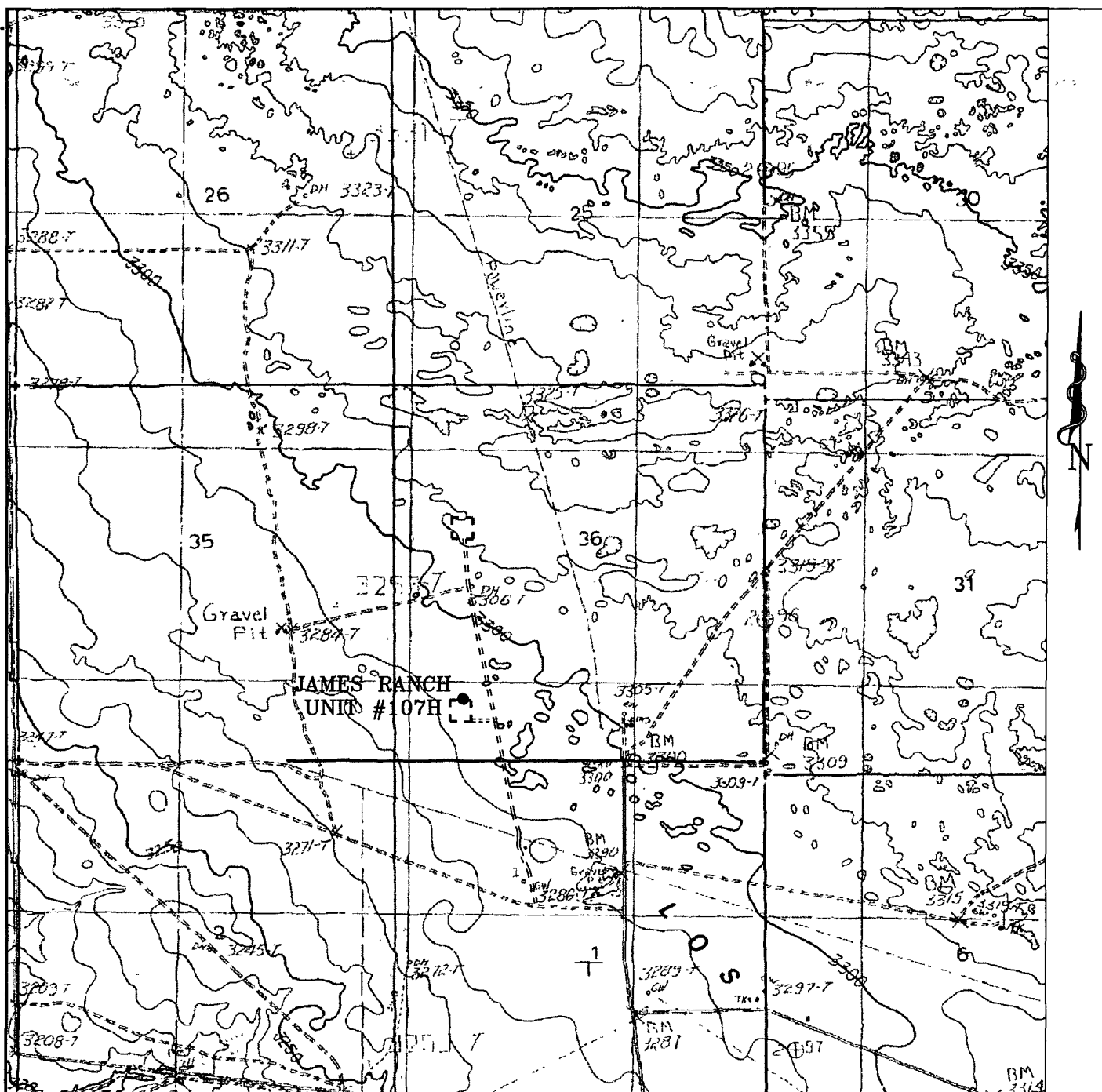
N.M.P.M., EDDY COUNTY, NEW MEXICO.

BASIN SURVEYS P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 20849 Drawn By: J. SMALL

Date: 12-09-2008 Disk 20849 JMS

Survey Date: 12-06-2008 Sheet 1 of 1 Sheets



JAMES RANCH UNIT #107H

860' FSL and 990' FWL

Section 36, Township 22 South, Range 30 East,
N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241
(575) 393-7316 - Office
(575) 392-2206 - Fax
basinsurveys.com

W O Number. JMS 20849

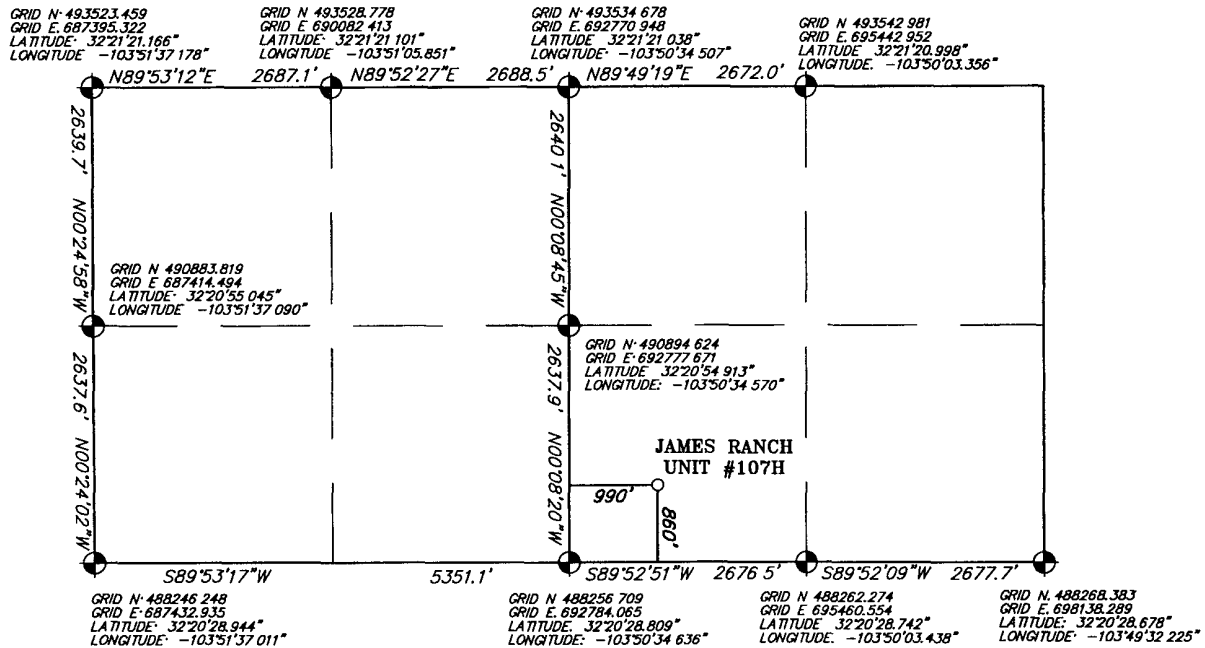
Survey Date 12-06-2008

Scale 1" = 2000'

Date 12-09-2008

BOPCO, L.P.

SECTION 36, TOWNSHIP 22 SOUTH, RANGE 30 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



JAMES RANCH UNIT #107H

860' FSL and 990' FWL

Section 36, Township 22 South, Range 30 East,
N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241
(575) 393-7316 - Office
(575) 392-2206 - Fax
basinsurveys.com

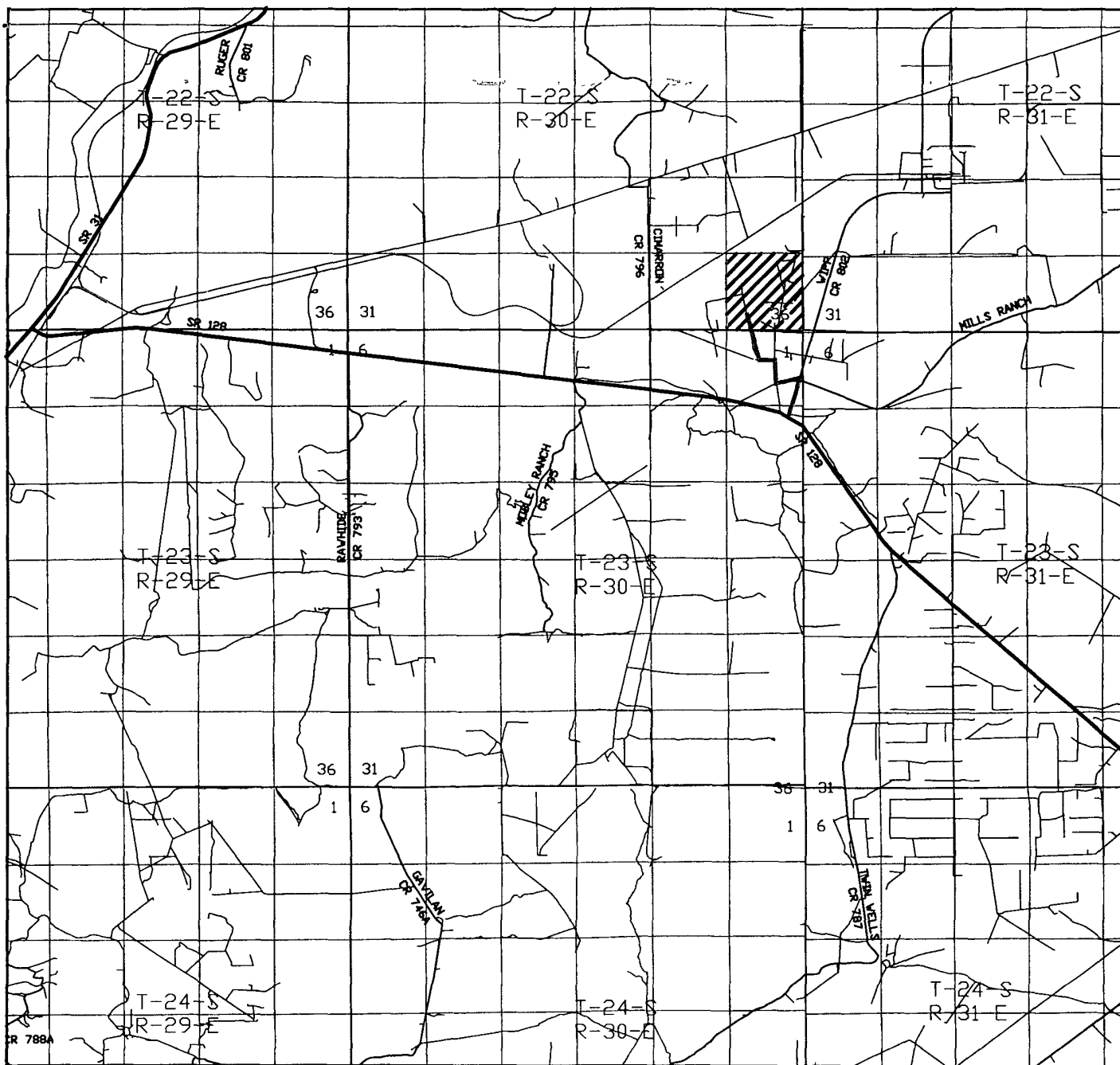
W.O. Number: JMS 20849

Survey Date 12-06-2008

Scale 1" = 2000'

Date 12-09-2008

BOPCO, L.P.



JAMES RANCH UNIT #107H

860' FSL and 990' FWL

Section 36, Township 22 South, Range 30 East,
N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241
(575) 393-7316 - Office
(575) 392-2206 - Fax
basinsurveys.com

W.O. Number JMS 20849

Survey Date. 12-06-2008

Scale. 1" = 2000'

Date 12-09-2008

BOPCO, L.P.

The Surface casing is to be set into the Rustler below all fresh water sands.
Production casing will be cemented using Halliburton acid soluble cement system in lateral hole and 9.7 ppg TunedLight in vertical. A DV Tool will be installed at approximately 6000' and cement circulated to surface
Drilling procedure, BOP diagram, and anticipated tops attached.

This well is located within the Secretary's Potash area.

The surface and bottom hole locations are both orthodox

BOPCO, L.P., at P. O. Box 2760, Midland, TX, 79702 is a subsidiary of BOPCO, L.P., 201 Mail Street, Ft Worth, TX, 76102 Bond No. COB000050 (Nationwide).

EIGHT-POINT-DRILLING PROGRAM

BOPCO, L.P.

NAME OF WELL: James Ranch Unit #107H

LEGAL DESCRIPTION - SURFACE. 860' FSL, 990' FWL, Section 36, T22S, R30E, Eddy County, NM.

BHL: 660' FSL, 990' FWL, Section 35, T22S, R30E, Eddy County, New Mexico

POINT 1: ESTIMATED FORMATION TOPS

(See No 2 Below)

POINT 2: WATER, OIL, GAS AND/OR MINERAL BEARING FORMATIONS

Anticipated Formation Tops. KB 3308' (estimated)

GL 3283'

<u>FORMATION</u>	<u>ESTIMATED TOP FROM KB</u>		<u>ESTIMATED SUB-SEA TOP</u>	<u>BEARING</u>
	<u>TVD</u>	<u>MD</u>		
T/Rustler	177'	177'	+ 3131'	Barren
B/Rustler	475'	475'	+ 2833'	Barren
T/Salt	601'	601'	+ 2707'	Barren
B/Salt	3497'	3497'	- 189'	Barren
T/Lamar Lime	3742'	3742'	- 434'	Barren
T/Ramsey	3781'	3781'	- 473'	Oil/Gas
T/Lower Cherry Canyon	5931'	5931'	- 2623'	Oil/Gas
KOP (Kick Off Point)	6810'	6810'	- 3502'	N/A
T/Brushy Canyon "U" Sand	7107'	7140'	- 3799'	Oil/Gas
EOC Target	7288'	7560'	- 3980'	Oil/Gas
TD (end of lateral)	7238'	12,441'	- 3930'	Oil/Gas

POINT 3: CASING PROGRAM

<u>TYPE</u>	<u>INTERVALS (MD)</u>	<u>Hole Size</u>	<u>PURPOSE</u>	<u>CONDITION</u>
20"	0' - 60'	24"	Conductor	Contractor Discretion
13-3/8", 48#, H-40, ST&C	0' - 591'	17-1/2"	Surface	New
9-5/8", 36#, J-55, 8RD, LT&C	0' - 3762'	12-1/4"	Intermediate	New
5-1/2", 17#, P-110, LT&C	0' - 7250'	8-3/4"	Production	New
5-1/2", 17#, P-110, Ultra Flush JT	7250' - 12,441'	8-3/4"	Production	New

CASING DESIGN SAFETY FACTORS:

<u>TYPE</u>	<u>TENSION</u>	<u>COLLAPSE</u>	<u>BURST</u>
13-3/8", 48#, H-40, ST&C	12 1	2 62	2 70
9-5/8", 36#, J-55, LT&C	3 74	1 12	1 04
5-1/2", 17#, J-55, LT&C	1 65	1 65	1 90
5-1/2", 17#, P110, Ultra Flush Jt	6 45	2 11	1 90

DESIGN CRITERIA AND CASING LOADING ASSUMPTIONS:

SURFACE CASING

- Tension A 1.6 design factor utilizing the effects of buoyancy (9.2 ppg)
- Collapse A 1.0 design factor with full internal evacuation and a collapse force equal to the mud gradient in which the casing will be run (0.48 psi/ft). The effects of axial load on collapse will be considered.
- Burst A 1.3 design factor with a surface pressure equal to the fracture gradient at setting depth less a gas gradient to the surface. Internal burst force at the shoe will be fracture pressure at that depth. Backup pressure will be formation pore pressure. In all cases a conservative fracture pressure will be used such that it represents the upper limit of potential fracture resistance up to a 1.0 psi/ft gradient. The effects of tension on burst will not be utilized.

PROTECTIVE CASING

- Tension A 1.6 design factor utilizing the effects of buoyancy (10 ppg)
- Collapse A 1.0 design factor with full internal evacuation and a collapse force equal to the mud gradient in which the casing will be run (0.52 psi/ft). The effects of axial load on collapse will be considered.
- In the case of development drilling, collapse design should be analyzed using internal evacuation equal to 1/3 the proposed total depth of the well. This criterion will be used when there is absolutely no potential of the protective string being used as a production casing string.
- Burst A 1.0 surface design factor and a 1.3 downhole design factor with a surface pressure equivalent to the fracture gradient at setting depth less a gas gradient to the surface. Internal burst force at the shoe will be fracture pressure at that depth. Backup pressure will be formation pore pressure. In all cases a conservative fracture pressure will be used such that it represents the upper limit of potential fracture resistance up to a 1.0 psi/ft gradient.

PRODUCTION CASING

- Tension A 1.6 design factor utilizing the effects of buoyancy (9.2 ppg)
- Collapse A 1.0 design factor with full internal evacuation and a collapse force equal to the mud gradient in which the casing will be run (0.48 psi/ft). The effects of axial load on collapse will be considered.
- Burst A 1.25 design factor with anticipated maximum tubing pressure (3529 psig) on top of the maximum anticipated packer fluid gradient. Backup on production strings will be formation pore pressure. The effects of tension on burst will not be utilized.

POINT 4: PRESSURE CONTROL EQUIPMENT (SEE ATTACHED DIAGRAM)

The blowout preventer equipment will be as shown in Diagram #2 and will consist of a double ram type preventer (3000 psi WP) and a bag type (Hydril) annular preventer (3000 psi WP). The same BOPE will be installed on the surface casinghead and on all subsequent casing strings. The BOP stack, choke, kill lines, kelly cocks, inside BOP, etc. when installed on the surface casinghead will be hydro-tested to 200 psig & 1000 psig with the rig mud pump. The BOPE when rigged up on the intermediate casing spool will be tested to 3000 psig by independent tester. In addition to the high pressure test, a low pressure (200 psig) test will be required.

SUCOA

These tests will be performed:

- a) Upon installation
- b) After any component changes
- c) Fifteen days after a previous test
- d) As required by well conditions

A function test to insure that the preventers are operating correctly will be performed on each trip.

POINT 5: MUD PROGRAM

DEPTH	MUD TYPE	WEIGHT	FV	PV	YP	FL	Ph
0' - 591'	FW Spud Mud	8.5 - 9.2	38-70	NC	NC	NC	10.0
591' - 3762'	Brine Water	9.8 - 10.2	28-30	NC	NC	NC	9.5 - 10.5
3762' - 7250'	FW/Gel	8.7 - 9.0	28-36	NC	NC	NC	9.5 - 10.0
7250' - 12,441'	FW/Gel/Starch	8.7 - 9.0	28-36	NC	NC	<20	9.5 - 10.0

NOTE: May increase vis for logging purposes only.

POINT 6: TECHNICAL STAGES OF OPERATION

A) TESTING

None anticipated

B) LOGGING

Run #1: PEX (GR-CNL/LDT-AIT) from as deep as possible in deviated hole ($\pm 7075'$) to 3458' with GR-CNL to surface.

Run #2: GR with MWD during drilling of build and horizontal portions of 8-3/4" hole.

Run #3: Drill pipe conveyed GR-NL-Density-Caliper, TD to 250' above the curve

C) CONVENTIONAL CORING

None anticipated

D) CEMENT

INTERVAL SURFACE	AMOUNT SXS	FT OF FILL	TYPE	GALS/SX	PPG	FT ³ /SX
Lead. 0 – 342' (100% excess Circ to surface)	300	342	EconoCem-HLC + 2 7 #/sk Salt	10.25	12 8	1 88
Tail 342' – 642' (100% excess)	340	300	HalCem-C + 2% CaCl ₂	6 39	14 8	1 35
INTERMEDIATE Lead 0' – 3262' (100% excess Circ to surface)	725	3262	EconoCem-C + 0 125 pps Poly-e-flake	16 62	11 5	2 78
Tail 3262' – 3762' (100% excess)	262	500	HalCem-C + 1% CaCl ₂	6 36	14.8	1 34
PRODUCTION. Stage 1 Lead 6000' – 6560' (50% excess)	75	560	Halco Tuned Lite	14 4	9 7	3 13
Tail 6560' – 12,441' (50% excess)	860	5881	Premium Plus-acid Soluble 10#/sk Silicate 50/50 blend 0 7 % Halad 344, 0 3% HR601, 0 25 #/sk D-Air 3000	11 34	15	2 62
DV Tool @ 6,000'						
Stage 2 Lead 0' – 5900' (50% excess)	720	5900	Halco Tuned Lite	14 4	9 7	3 13
Tail 5900' – 6000' (50% excess)	30	100	Class "C" Neat	6 34	14 8	1 34

E) DIRECTIONAL DRILLING

BOPCO, L P plans to drill out the 9-5/8" intermediate casing with a 8-3/4" bit to a TVD of approximately 6810' at which point a directional hole will be kicked off and drilled at an azimuth of 267 75°, building angle at 12 00°/100' to a max angle of 90 59° at a TVD of 7288' (MD 7565'). This 90.59° angle will be maintained to a MD of 12,441' or TVD of 7238'.

POINT 7: ANTICIPATED RESERVOIR CONDITIONS

Normal pressures are anticipated throughout Delaware section. A BHP of 3138 psi (max) or MWE of 8.4 ppg is expected. Lost circulation may exist in the Delaware Section from 3815'-7125' TVD. No H₂S is anticipated.

POINT 8: OTHER PERTINENT INFORMATION

A) Auxiliary Equipment

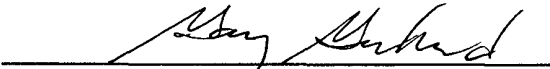
Upper and lower kelly cocks. Full opening stab in valve on the rig floor.

B) Anticipated Starting Date

Upon approval

39 days drilling operations

14 days completion operations



Gary E. Gerhard

GEG/jdb
February 10, 2009

BOPCO L.P.

Eddy Co., New Mexico (Nad 83)

James Ranch Unit #107H

James Ranch Unit #107H

Lateral #1

Plan: Plan #1

Standard Planning Report

10 February, 2009

Planning Report

Database: EDM 5000 1 Black Viper
 Company: BOPCO L P
 Project: Eddy Co , New Mexico (Nad 83)
 Site: James Ranch Unit #107H
 Well: James Ranch Unit #107H
 Wellbore: Lateral #1
 Design: Plan #1

Local Co-ordinate Reference: Site James Ranch Unit #107H
 TVD Reference: KB Elevation @ 3308 00ft (KB Elevation)
 MD Reference: KB Elevation @ 3308 00ft (KB Elevation)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

Project: Eddy Co , New Mexico (Nad 83)
 Map System: US State Plane 1983 System Datum: Mean Sea Level
 Geo Datum: North American Datum 1983
 Map Zone: New Mexico Eastern Zone

Site: James Ranch Unit #107H
 Site Position: Northing: 489,118 77 ft Latitude: 32° 20' 37 285 N
 From: Map Easting: 693,771 97 ft Longitude: 103° 50' 23 090 W
 Position Uncertainty: 0 00 ft Slot Radius: 0 " Grid Convergence: 0 26 °

Well: James Ranch Unit #107H
 Well Position: +N/-S 0 00 ft Northing: 489,118 77 ft Latitude: 32° 20' 37 285 N
 +E/-W 0 00 ft Easting: 693,771 97 ft Longitude: 103° 50' 23 090 W
 Position Uncertainty: 0 00 ft Wellhead Elevation: 3,308 00 ft Ground Level: 3,283 00 ft

Wellbore: Lateral #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/18/2008	8 00	60 33	48,936

Design: Plan #1

Audit Notes:
 Version: Phase: PROTOTYPE Tie On Depth: 6,810 50

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0 00	0 00	0 00	267 75

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
6,810 50	0 00	0 00	6,810 50	0 00	0 00	0 00	0 00	0 00	0 00	
7,565 49	90 59	267 75	7,288 00	-18 96	-482 05	12 00	12 00	0 00	267 75	
12,441 11	90 59	267 75	7,238 00	-210 59	-5,353 65	0 00	0 00	0 00	0 00	PBHL#1(JRU#107H)

Planning Report

Database:	EDM 5000.1 Black Viper	Local Co-ordinate Reference:	Site James Ranch Unit #107H
Company:	BOPCO L P	TVD Reference:	KB Elevation @ 3308.00ft (KB Elevation)
Project:	Eddy Co., New Mexico (Nad 83)	MD Reference:	KB Elevation @ 3308.00ft (KB Elevation)
Site:	James Ranch Unit #107H	North Reference:	Grd
Well:	James Ranch Unit #107H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral #1		
Design:	Plan #1		

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)
6,810.00	0.00	0.00	6,810.00	0.00	0.00	0.00	0.00	0.00	0.00
6,840.00	3.54	267.75	6,839.98	-0.04	-0.91	0.91	12.00	12.00	0.00
6,870.00	7.14	267.75	6,869.85	-0.15	-3.70	3.70	12.00	12.00	0.00
6,900.00	10.74	267.75	6,899.48	-0.33	-8.36	8.36	12.00	12.00	0.00
6,930.00	14.34	267.75	6,928.76	-0.58	-14.86	14.87	12.00	12.00	0.00
6,960.00	17.94	267.75	6,957.57	-0.91	-23.19	23.21	12.00	12.00	0.00
6,990.00	21.54	267.75	6,985.80	-1.31	-33.32	33.34	12.00	12.00	0.00
7,020.00	25.14	267.75	7,013.34	-1.78	-45.19	45.22	12.00	12.00	0.00
7,050.00	28.74	267.75	7,040.08	-2.31	-58.77	58.81	12.00	12.00	0.00
7,080.00	32.34	267.75	7,065.92	-2.91	-73.99	74.05	12.00	12.00	0.00
7,110.00	35.94	267.75	7,090.75	-3.57	-90.81	90.88	12.00	12.00	0.00
7,140.00	39.54	267.75	7,114.47	-4.29	-109.16	109.24	12.00	12.00	0.00
7,170.00	43.13	267.75	7,136.99	-5.07	-128.95	129.05	12.00	12.00	0.00
7,200.00	46.73	267.75	7,158.22	-5.91	-150.12	150.24	12.00	12.00	0.00
7,230.00	50.33	267.75	7,178.09	-6.79	-172.58	172.71	12.00	12.00	0.00
7,260.00	53.93	267.75	7,196.50	-7.72	-196.24	196.39	12.00	12.00	0.00
7,290.00	57.53	267.75	7,213.39	-8.69	-221.01	221.18	12.00	12.00	0.00
7,320.00	61.13	267.75	7,228.69	-9.71	-246.79	246.98	12.00	12.00	0.00
7,350.00	64.73	267.75	7,242.33	-10.76	-273.48	273.69	12.00	12.00	0.00
7,380.00	68.33	267.75	7,254.28	-11.84	-300.97	301.21	12.00	12.00	0.00
7,410.00	71.93	267.75	7,264.47	-12.95	-329.16	329.41	12.00	12.00	0.00
7,440.00	75.53	267.75	7,272.88	-14.08	-357.93	358.21	12.00	12.00	0.00
7,470.00	79.13	267.75	7,279.46	-15.23	-387.17	387.47	12.00	12.00	0.00
7,500.00	82.73	267.75	7,284.18	-16.39	-416.77	417.09	12.00	12.00	0.00
7,530.00	86.33	267.75	7,287.04	-17.57	-446.61	446.95	12.00	12.00	0.00
7,560.00	89.93	267.75	7,288.02	-18.75	-476.56	476.93	12.00	12.00	0.00
7,565.49	90.59	267.75	7,288.00	-18.96	-482.05	482.42	12.00	12.00	0.00
7,590.00	90.59	267.75	7,287.75	-19.92	-506.54	506.93	0.00	0.00	0.00
7,620.00	90.59	267.75	7,287.44	-21.10	-536.51	536.93	0.00	0.00	0.00
7,650.00	90.59	267.75	7,287.13	-22.28	-566.49	566.93	0.00	0.00	0.00
7,680.00	90.59	267.75	7,286.82	-23.46	-596.46	596.93	0.00	0.00	0.00
7,710.00	90.59	267.75	7,286.52	-24.64	-626.44	626.92	0.00	0.00	0.00
7,740.00	90.59	267.75	7,286.21	-25.82	-656.41	656.92	0.00	0.00	0.00
7,770.00	90.59	267.75	7,285.90	-27.00	-686.39	686.92	0.00	0.00	0.00
7,800.00	90.59	267.75	7,285.59	-28.18	-716.36	716.92	0.00	0.00	0.00
7,830.00	90.59	267.75	7,285.29	-29.36	-746.34	746.92	0.00	0.00	0.00
7,860.00	90.59	267.75	7,284.98	-30.54	-776.32	776.92	0.00	0.00	0.00
7,890.00	90.59	267.75	7,284.67	-31.72	-806.29	806.91	0.00	0.00	0.00
7,920.00	90.59	267.75	7,284.36	-32.90	-836.27	836.91	0.00	0.00	0.00
7,950.00	90.59	267.75	7,284.06	-34.07	-866.24	866.91	0.00	0.00	0.00
7,980.00	90.59	267.75	7,283.75	-35.25	-896.22	896.91	0.00	0.00	0.00
8,010.00	90.59	267.75	7,283.44	-36.43	-926.19	926.91	0.00	0.00	0.00
8,040.00	90.59	267.75	7,283.13	-37.61	-956.17	956.91	0.00	0.00	0.00
8,070.00	90.59	267.75	7,282.83	-38.79	-986.14	986.90	0.00	0.00	0.00
8,100.00	90.59	267.75	7,282.52	-39.97	-1,016.12	1,016.90	0.00	0.00	0.00
8,130.00	90.59	267.75	7,282.21	-41.15	-1,046.09	1,046.90	0.00	0.00	0.00
8,160.00	90.59	267.75	7,281.90	-42.33	-1,076.07	1,076.90	0.00	0.00	0.00
8,190.00	90.59	267.75	7,281.59	-43.51	-1,106.04	1,106.90	0.00	0.00	0.00
8,220.00	90.59	267.75	7,281.29	-44.69	-1,136.02	1,136.90	0.00	0.00	0.00
8,250.00	90.59	267.75	7,280.98	-45.87	-1,165.99	1,166.90	0.00	0.00	0.00
8,280.00	90.59	267.75	7,280.67	-47.04	-1,195.97	1,196.89	0.00	0.00	0.00
8,310.00	90.59	267.75	7,280.36	-48.22	-1,225.94	1,226.89	0.00	0.00	0.00
8,340.00	90.59	267.75	7,280.06	-49.40	-1,255.92	1,256.89	0.00	0.00	0.00
8,370.00	90.59	267.75	7,279.75	-50.58	-1,285.89	1,286.89	0.00	0.00	0.00

Planning Report

Database: EDM 5000 1 Black Viper
 Company: BOPCO L P
 Project: Eddy Co , New Mexico (Nad 83)
 Site: James Ranch Unit #107H
 Well: James Ranch Unit #107H
 Wellbore: Lateral #1
 Design: Plan #1

Local Co-ordinate Reference:
 TVD Reference:
 MD Reference:
 North Reference:
 Survey Calculation Method:

Site James Ranch Unit #107H
 KB Elevation @ 3308.00ft (KB Elevation)
 KB Elevation @ 3308.00ft (KB Elevation)
 Gnd
 Minimum Curvature

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)
8,400.00	90.59	267.75	7,279.44	-51.76	-1,315.87	1,316.89	0.00	0.00	0.00
8,430.00	90.59	267.75	7,279.13	-52.94	-1,345.84	1,346.89	0.00	0.00	0.00
8,460.00	90.59	267.75	7,278.83	-54.12	-1,375.82	1,376.88	0.00	0.00	0.00
8,490.00	90.59	267.75	7,278.52	-55.30	-1,405.80	1,406.88	0.00	0.00	0.00
8,520.00	90.59	267.75	7,278.21	-56.48	-1,435.77	1,436.88	0.00	0.00	0.00
8,550.00	90.59	267.75	7,277.90	-57.66	-1,465.75	1,466.88	0.00	0.00	0.00
8,580.00	90.59	267.75	7,277.60	-58.84	-1,495.72	1,496.88	0.00	0.00	0.00
8,610.00	90.59	267.75	7,277.29	-60.01	-1,525.70	1,526.88	0.00	0.00	0.00
8,640.00	90.59	267.75	7,276.98	-61.19	-1,555.67	1,556.87	0.00	0.00	0.00
8,670.00	90.59	267.75	7,276.67	-62.37	-1,585.65	1,586.87	0.00	0.00	0.00
8,700.00	90.59	267.75	7,276.36	-63.55	-1,615.62	1,616.87	0.00	0.00	0.00
8,730.00	90.59	267.75	7,276.06	-64.73	-1,645.60	1,646.87	0.00	0.00	0.00
8,760.00	90.59	267.75	7,275.75	-65.91	-1,675.57	1,676.87	0.00	0.00	0.00
8,790.00	90.59	267.75	7,275.44	-67.09	-1,705.55	1,706.87	0.00	0.00	0.00
8,820.00	90.59	267.75	7,275.13	-68.27	-1,735.52	1,736.87	0.00	0.00	0.00
8,850.00	90.59	267.75	7,274.83	-69.45	-1,765.50	1,766.86	0.00	0.00	0.00
8,880.00	90.59	267.75	7,274.52	-70.63	-1,795.47	1,796.86	0.00	0.00	0.00
8,910.00	90.59	267.75	7,274.21	-71.81	-1,825.45	1,826.86	0.00	0.00	0.00
8,940.00	90.59	267.75	7,273.90	-72.98	-1,855.42	1,856.86	0.00	0.00	0.00
8,970.00	90.59	267.75	7,273.60	-74.16	-1,885.40	1,886.86	0.00	0.00	0.00
9,000.00	90.59	267.75	7,273.29	-75.34	-1,915.37	1,916.86	0.00	0.00	0.00
9,030.00	90.59	267.75	7,272.98	-76.52	-1,945.35	1,946.85	0.00	0.00	0.00
9,060.00	90.59	267.75	7,272.67	-77.70	-1,975.32	1,976.85	0.00	0.00	0.00
9,090.00	90.59	267.75	7,272.37	-78.88	-2,005.30	2,006.85	0.00	0.00	0.00
9,120.00	90.59	267.75	7,272.06	-80.06	-2,035.28	2,036.85	0.00	0.00	0.00
9,150.00	90.59	267.75	7,271.75	-81.24	-2,065.25	2,066.85	0.00	0.00	0.00
9,180.00	90.59	267.75	7,271.44	-82.42	-2,095.23	2,096.85	0.00	0.00	0.00
9,210.00	90.59	267.75	7,271.13	-83.60	-2,125.20	2,126.84	0.00	0.00	0.00
9,240.00	90.59	267.75	7,270.83	-84.78	-2,155.18	2,156.84	0.00	0.00	0.00
9,270.00	90.59	267.75	7,270.52	-85.95	-2,185.15	2,186.84	0.00	0.00	0.00
9,300.00	90.59	267.75	7,270.21	-87.13	-2,215.13	2,216.84	0.00	0.00	0.00
9,330.00	90.59	267.75	7,269.90	-88.31	-2,245.10	2,246.84	0.00	0.00	0.00
9,360.00	90.59	267.75	7,269.60	-89.49	-2,275.08	2,276.84	0.00	0.00	0.00
9,390.00	90.59	267.75	7,269.29	-90.67	-2,305.05	2,306.84	0.00	0.00	0.00
9,420.00	90.59	267.75	7,268.98	-91.85	-2,335.03	2,336.83	0.00	0.00	0.00
9,450.00	90.59	267.75	7,268.67	-93.03	-2,365.00	2,366.83	0.00	0.00	0.00
9,480.00	90.59	267.75	7,268.37	-94.21	-2,394.98	2,396.83	0.00	0.00	0.00
9,510.00	90.59	267.75	7,268.06	-95.39	-2,424.95	2,426.83	0.00	0.00	0.00
9,540.00	90.59	267.75	7,267.75	-96.57	-2,454.93	2,456.83	0.00	0.00	0.00
9,570.00	90.59	267.75	7,267.44	-97.75	-2,484.90	2,486.83	0.00	0.00	0.00
9,600.00	90.59	267.75	7,267.14	-98.92	-2,514.88	2,516.82	0.00	0.00	0.00
9,630.00	90.59	267.75	7,266.83	-100.10	-2,544.85	2,546.82	0.00	0.00	0.00
9,660.00	90.59	267.75	7,266.52	-101.28	-2,574.83	2,576.82	0.00	0.00	0.00
9,690.00	90.59	267.75	7,266.21	-102.46	-2,604.81	2,606.82	0.00	0.00	0.00
9,720.00	90.59	267.75	7,265.90	-103.64	-2,634.78	2,636.82	0.00	0.00	0.00
9,750.00	90.59	267.75	7,265.60	-104.82	-2,664.76	2,666.82	0.00	0.00	0.00
9,780.00	90.59	267.75	7,265.29	-106.00	-2,694.73	2,696.81	0.00	0.00	0.00
9,810.00	90.59	267.75	7,264.98	-107.18	-2,724.71	2,726.81	0.00	0.00	0.00
9,840.00	90.59	267.75	7,264.67	-108.36	-2,754.68	2,756.81	0.00	0.00	0.00
9,870.00	90.59	267.75	7,264.37	-109.54	-2,784.66	2,786.81	0.00	0.00	0.00
9,900.00	90.59	267.75	7,264.06	-110.72	-2,814.63	2,816.81	0.00	0.00	0.00
9,930.00	90.59	267.75	7,263.75	-111.89	-2,844.61	2,846.81	0.00	0.00	0.00
9,960.00	90.59	267.75	7,263.44	-113.07	-2,874.58	2,876.81	0.00	0.00	0.00
9,990.00	90.59	267.75	7,263.14	-114.25	-2,904.56	2,906.80	0.00	0.00	0.00

Planning Report

Database: EDM 5000 1 Black Viper
 Company: BOPCO L P
 Project: Eddy Co.; New Mexico (Nad 83)
 Site: James Ranch Unit #107H
 Well: James Ranch Unit #107H
 Wellbore: Lateral #1
 Design: Plan #1

Local Co-ordinate Reference:
 TVD Reference:
 MD Reference:
 North Reference:
 Survey Calculation Method:

Site James Ranch Unit #107H
 KB Elevation @ 3308 00ft (KB Elevation)
 KB Elevation @ 3308 00ft (KB Elevation)
 Grid
 Minimum Curvature

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)
10,020 00	90 59	267 75	7,262 83	-115 43	-2,934 53	2,936 80	0 00	0 00	0 00
10,050 00	90 59	267 75	7,262 52	-116 61	-2,964 51	2,966 80	0 00	0 00	0 00
10,080 00	90 59	267 75	7,262 21	-117 79	-2,994 48	2,996 80	0 00	0 00	0 00
10,110 00	90 59	267 75	7,261 91	-118 97	-3,024 46	3,026 80	0 00	0 00	0 00
10,140 00	90 59	267 75	7,261 60	-120 15	-3,054 43	3,056 80	0 00	0 00	0 00
10,170 00	90 59	267 75	7,261 29	-121 33	-3,084 41	3,086 79	0 00	0 00	0 00
10,200 00	90 59	267 75	7,260 98	-122 51	-3,114 38	3,116 79	0 00	0 00	0 00
10,230 00	90 59	267 75	7,260 67	-123 69	-3,144 36	3,146 79	0 00	0 00	0 00
10,260 00	90 59	267 75	7,260 37	-124 86	-3,174 33	3,176 79	0 00	0 00	0 00
10,290 00	90 59	267 75	7,260 06	-126 04	-3,204 31	3,206 79	0 00	0 00	0 00
10,320 00	90 59	267 75	7,259 75	-127 22	-3,234 29	3,236 79	0 00	0 00	0 00
10,350 00	90 59	267 75	7,259 44	-128 40	-3,264 26	3,266 78	0 00	0 00	0 00
10,380 00	90 59	267 75	7,259 14	-129 58	-3,294 24	3,296 78	0 00	0 00	0 00
10,410 00	90 59	267 75	7,258 83	-130 76	-3,324 21	3,326 78	0 00	0 00	0 00
10,440 00	90 59	267 75	7,258 52	-131 94	-3,354 19	3,356 78	0 00	0 00	0 00
10,470 00	90 59	267 75	7,258 21	-133 12	-3,384 16	3,386 78	0 00	0 00	0 00
10,500 00	90 59	267 75	7,257 91	-134 30	-3,414 14	3,416 78	0 00	0 00	0 00
10,530 00	90 59	267 75	7,257 60	-135 48	-3,444 11	3,446 78	0 00	0 00	0 00
10,560 00	90 59	267 75	7,257 29	-136 66	-3,474 09	3,476 77	0 00	0 00	0 00
10,590 00	90 59	267 75	7,256 98	-137 83	-3,504 06	3,506 77	0 00	0 00	0 00
10,620 00	90 59	267 75	7,256 68	-139 01	-3,534 04	3,536 77	0 00	0 00	0 00
10,650 00	90 59	267 75	7,256 37	-140 19	-3,564 01	3,566 77	0 00	0 00	0 00
10,680 00	90 59	267 75	7,256 06	-141 37	-3,593 99	3,596 77	0 00	0 00	0 00
10,710 00	90 59	267 75	7,255 75	-142 55	-3,623 96	3,626 77	0 00	0 00	0 00
10,740 00	90 59	267 75	7,255 44	-143 73	-3,653 94	3,656 76	0 00	0 00	0 00
10,770 00	90 59	267 75	7,255 14	-144 91	-3,683 91	3,686 76	0 00	0 00	0 00
10,800 00	90 59	267 75	7,254 83	-146 09	-3,713 89	3,716 76	0 00	0 00	0 00
10,830 00	90 59	267 75	7,254 52	-147 27	-3,743 86	3,746 76	0 00	0 00	0 00
10,860 00	90 59	267 75	7,254 21	-148 45	-3,773 84	3,776 76	0 00	0 00	0 00
10,890 00	90 59	267 75	7,253 91	-149 63	-3,803 81	3,806 76	0 00	0 00	0 00
10,920 00	90 59	267 75	7,253 60	-150 80	-3,833 79	3,836 75	0 00	0 00	0 00
10,950 00	90 59	267 75	7,253 29	-151 98	-3,863 77	3,866 75	0 00	0 00	0 00
10,980 00	90 59	267 75	7,252 98	-153 16	-3,893 74	3,896 75	0 00	0 00	0 00
11,010 00	90 59	267 75	7,252 68	-154 34	-3,923 72	3,926 75	0 00	0 00	0 00
11,040 00	90 59	267 75	7,252 37	-155 52	-3,953 69	3,956 75	0 00	0 00	0 00
11,070 00	90 59	267 75	7,252 06	-156 70	-3,983 67	3,986 75	0 00	0 00	0 00
11,100 00	90 59	267 75	7,251 75	-157 88	-4,013 64	4,016 75	0 00	0 00	0 00
11,130 00	90 59	267 75	7,251 45	-159 06	-4,043 62	4,046 74	0 00	0 00	0 00
11,160 00	90 59	267 75	7,251 14	-160 24	-4,073 59	4,076 74	0 00	0 00	0 00
11,190 00	90 59	267 75	7,250 83	-161 42	-4,103 57	4,106 74	0 00	0 00	0 00
11,220 00	90 59	267 75	7,250 52	-162 60	-4,133 54	4,136 74	0 00	0 00	0 00
11,250 00	90 59	267 75	7,250 21	-163 77	-4,163 52	4,166 74	0 00	0 00	0 00
11,280 00	90 59	267 75	7,249 91	-164 95	-4,193 49	4,196 74	0 00	0 00	0 00
11,310 00	90 59	267 75	7,249 60	-166 13	-4,223 47	4,226 73	0 00	0 00	0 00
11,340 00	90 59	267 75	7,249 29	-167 31	-4,253 44	4,256 73	0 00	0 00	0 00
11,370 00	90 59	267 75	7,248 98	-168 49	-4,283 42	4,286 73	0 00	0 00	0 00
11,400 00	90 59	267 75	7,248 68	-169 67	-4,313 39	4,316 73	0 00	0 00	0 00
11,430 00	90 59	267 75	7,248 37	-170 85	-4,343 37	4,346 73	0 00	0 00	0 00
11,460 00	90 59	267 75	7,248 06	-172 03	-4,373 34	4,376 73	0 00	0 00	0 00
11,490 00	90 59	267 75	7,247 75	-173 21	-4,403 32	4,406 72	0 00	0 00	0 00
11,520 00	90 59	267 75	7,247 45	-174 39	-4,433 29	4,436 72	0 00	0 00	0 00
11,550 00	90 59	267 75	7,247 14	-175 57	-4,463 27	4,466 72	0 00	0 00	0 00
11,580 00	90 59	267 75	7,246 83	-176 74	-4,493 25	4,496 72	0 00	0 00	0 00
11,610 00	90 59	267 75	7,246 52	-177 92	-4,523 22	4,526 72	0 00	0 00	0 00

Planning Report

Database: EDM 5000 1 Black Viper
 Company: BOPCO L P
 Project: Eddy Co., New Mexico (Nad 83)
 Site: James Ranch Unit #107H
 Well: James Ranch Unit #107H
 Wellbore: Lateral #1
 Design: Plan #1

Local Co-ordinate Reference:
 TVD Reference:
 MD Reference:
 North Reference:
 Survey Calculation Method:

Site James Ranch Unit #107H
 KB Elevation @ 3308 00ft (KB Elevation)
 KB Elevation @ 3308 00ft (KB Elevation)
 Grd
 Minimum Curvature

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)
11,640 00	90 59	267 75	7,246 22	-179 10	-4,553 20	4,556 72	0 00	0 00	0 00
11,670 00	90 59	267 75	7,245 91	-180 28	-4,583 17	4,586 72	0 00	0 00	0 00
11,700 00	90 59	267 75	7,245 60	-181 46	-4,613 15	4,616 71	0 00	0 00	0 00
11,730 00	90 59	267 75	7,245 29	-182 64	-4,643 12	4,646 71	0 00	0 00	0 00
11,760 00	90 59	267 75	7,244 98	-183 82	-4,673 10	4,676 71	0 00	0 00	0 00
11,790 00	90 59	267 75	7,244 68	-185 00	-4,703 07	4,706 71	0 00	0 00	0 00
11,820 00	90 59	267 75	7,244 37	-186 18	-4,733 05	4,736 71	0 00	0 00	0 00
11,850 00	90 59	267 75	7,244 06	-187 36	-4,763 02	4,766 71	0 00	0 00	0 00
11,880 00	90 59	267 75	7,243 75	-188 54	-4,793 00	4,796 70	0 00	0 00	0 00
11,910 00	90 59	267 75	7,243 45	-189 71	-4,822 97	4,826 70	0 00	0 00	0 00
11,940 00	90 59	267 75	7,243 14	-190 89	-4,852 95	4,856 70	0 00	0 00	0 00
11,970 00	90 59	267 75	7,242 83	-192 07	-4,882 92	4,886 70	0 00	0 00	0 00
12,000 00	90 59	267 75	7,242 52	-193 25	-4,912 90	4,916 70	0 00	0 00	0 00
12,030 00	90 59	267 75	7,242 22	-194 43	-4,942 87	4,946 70	0 00	0 00	0 00
12,060 00	90 59	267 75	7,241 91	-195 61	-4,972 85	4,976 69	0 00	0 00	0 00
12,090 00	90 59	267 75	7,241 60	-196 79	-5,002 82	5,006 69	0 00	0 00	0 00
12,120 00	90 59	267 75	7,241 29	-197 97	-5,032 80	5,036 69	0 00	0 00	0 00
12,150 00	90 59	267 75	7,240 99	-199 15	-5,062 77	5,066 69	0 00	0 00	0 00
12,180 00	90 59	267 75	7,240 68	-200 33	-5,092 75	5,096 69	0 00	0 00	0 00
12,210 00	90 59	267 75	7,240 37	-201 51	-5,122 73	5,126 69	0 00	0 00	0 00
12,240 00	90 59	267 75	7,240 06	-202 68	-5,152 70	5,156 69	0 00	0 00	0 00
12,270 00	90 59	267 75	7,239 75	-203 86	-5,182 68	5,186 68	0 00	0 00	0 00
12,300 00	90 59	267 75	7,239 45	-205 04	-5,212 65	5,216 68	0 00	0 00	0 00
12,330 00	90 59	267 75	7,239 14	-206 22	-5,242 63	5,246 68	0 00	0 00	0 00
12,360 00	90 59	267 75	7,238 83	-207 40	-5,272 60	5,276 68	0 00	0 00	0 00
12,390 00	90 59	267 75	7,238 52	-208 58	-5,302 58	5,306 68	0 00	0 00	0 00
12,420 00	90 59	267 75	7,238 22	-209 76	-5,332 55	5,336 68	0 00	0 00	0 00
12,441 11	90 59	267 75	7,238 00	-210 59	-5,353 65	5,357 79	0 00	0 00	0 00

Design Targets									
Target Name	hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude
LL[JRU#107H]	- Shape	0 00	0 00	5 00	0 00	0 00	489,118 77	693,771 97	32° 20' 37 285 N
- plan misses target center by 6805 50ft at 6810 50ft MD (6810 50 TVD, 0 00 N, 0 00 E)									
- Rectangle (sides W6,675 20 H1,320 00 D0 00)									
HL[JRU#107H]	- Shape	0 00	0 00	5 00	0 00	0 00	489,118 77	693,771 97	32° 20' 37 285 N
- plan misses target center by 6805 50ft at 6810 50ft MD (6810 50 TVD, 0 00 N, 0 00 E)									
- Rectangle (sides W6,015 00 H660 00 D0 00)									
PBHL#1[JRU#107H]	- Shape	0 00	0 00	7,238 00	-210 59	-5,353 65	488,908 18	688,418 33	32° 20' 35 441 N
- plan hits target center									
- Point									

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
7,160 51	7,130 00	Brushy Canyon U Sand		0 00		

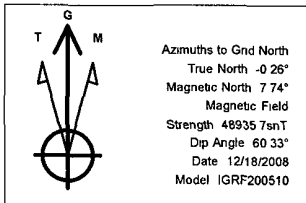
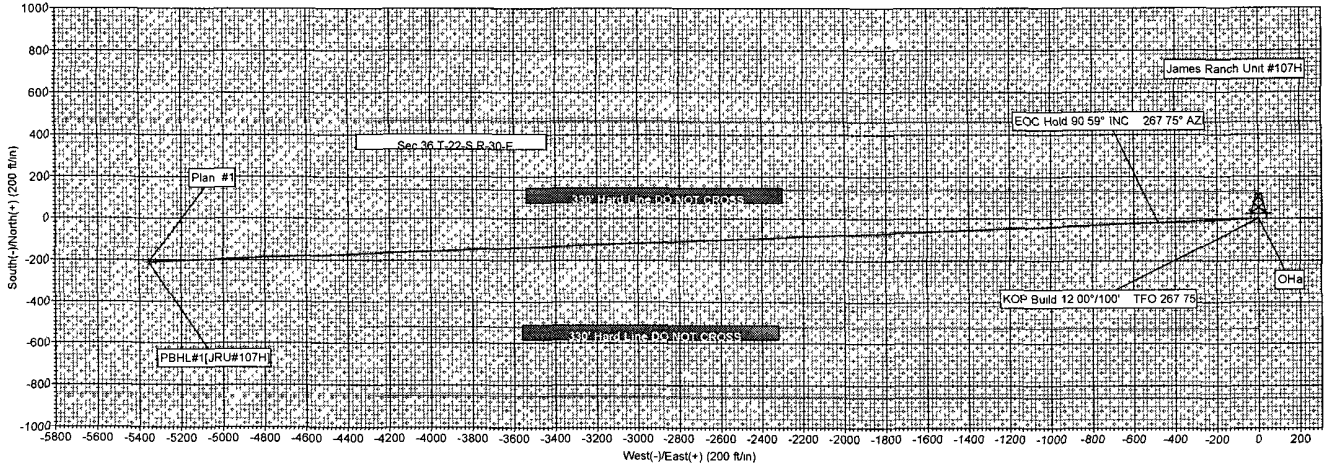
Planning Report

Database:	EDM 5000 1 Black Viper	Local Co-ordinate Reference:	Site James Ranch Unit #107H
Company:	BOPCO L P	TVD Reference:	KB Elevation @ 3308 00ft (KB Elevation)
Project:	Eddy Co , New Mexico (Nad 83)	MD Reference:	KB Elevation @ 3308 00ft (KB Elevation)
Site:	James Ranch Unit #107H	North Reference:	Gnd
Well:	James Ranch Unit #107H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral #1		
Design:	Plan #1		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
6,810 50	6,810 50	0 00	0 00	KOP Build 12 00°/100' TFO 267 75
7,565 49	7,288 00	-18 96	-482 05	EOC Hold 90 59° INC 267 75° AZI



Project Eddy Co., New Mexico (Nad 83)
 Site James Ranch Unit #107H
 Well James Ranch Unit #107H
 Wellbore Lateral #1
 Plan Plan #1 (James Ranch Unit #107H/Lateral #1)

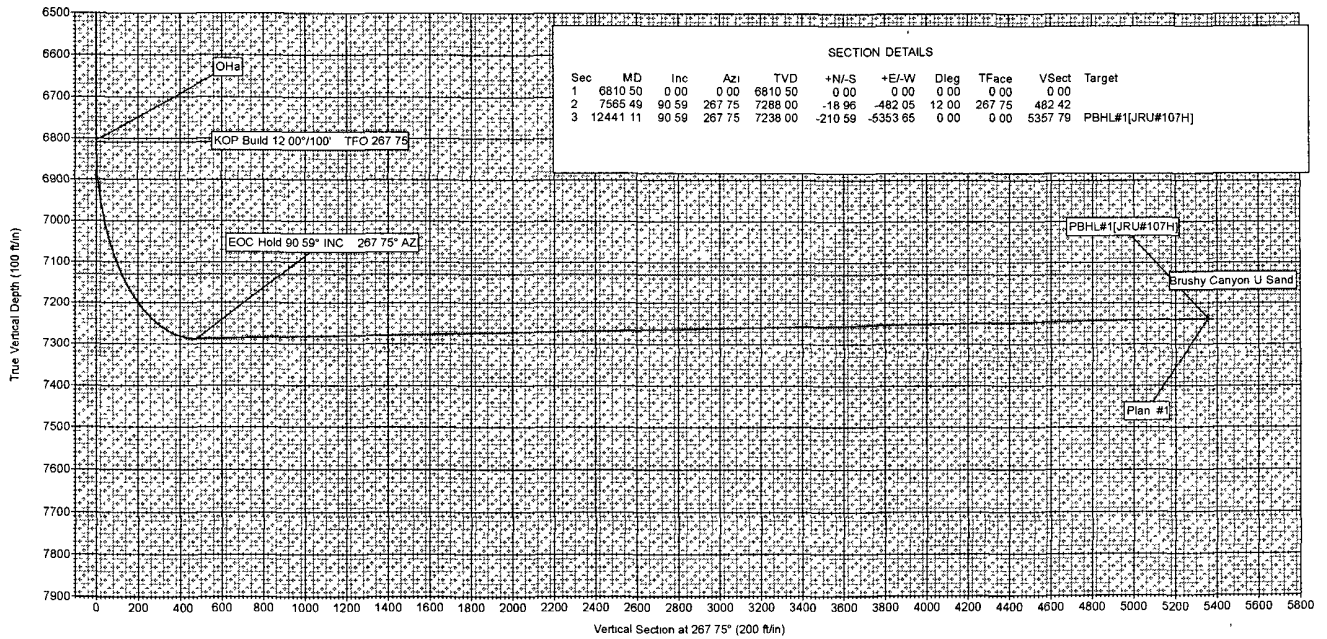


ANNOTATIONS

TVD	MD	Annotation
6810 50	6810 50	KOP Build 12 00°/100' TFO 267 75
7288 00	7555 49	EOC Hold 90 59° INC 267 75° AZI

PROJECT DETAILS Eddy Co New Mexico (Nad 83)

Geodetic System US State Plane 1983
 Datum North American Datum 1983
 Ellipsoid GRS 1980
 Zone New Mexico Eastern Zone
 System Datum Mean Sea Level





BOPCO, L.P.
James Ranch Unit #107H
Section 36, T-22-S, R-30-E
Eddy County, NM

Exhibit "D"

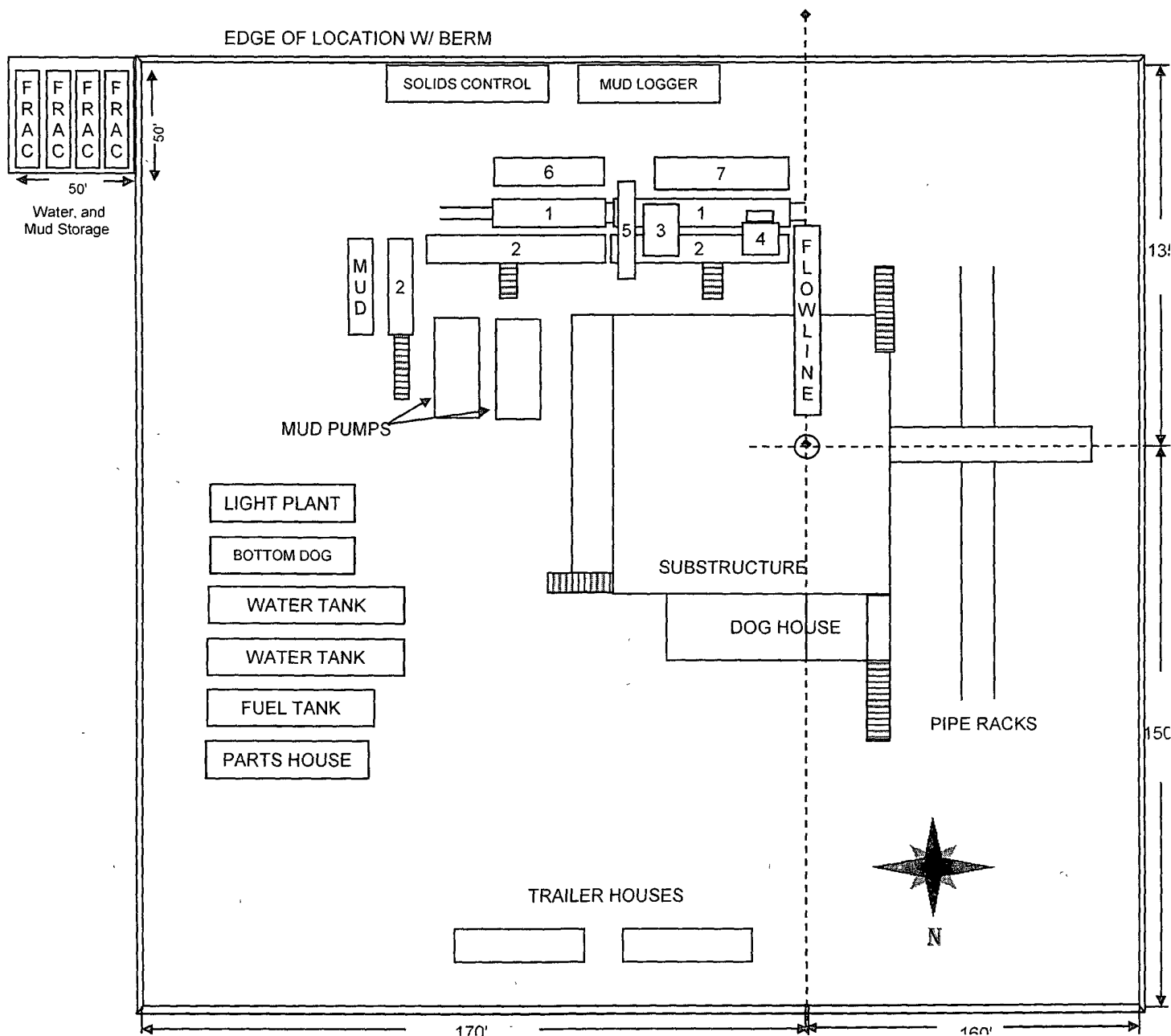
RIG LAYOUT SCHEMATIC
INCLUSIVE OF CLOSED-LOOP DESIGN PLAN

Solids Control Equipment Legend

- | | |
|-----------------|--------------------|
| 1) Roll Off Bin | 5) Centrifuge |
| 2) Steel Tank | 6) Dewatering Unit |
| 3) Mud Cleaner | 7) Catch Tank |
| 4) Shaker | 8) Gas Separator |

330' x 285'

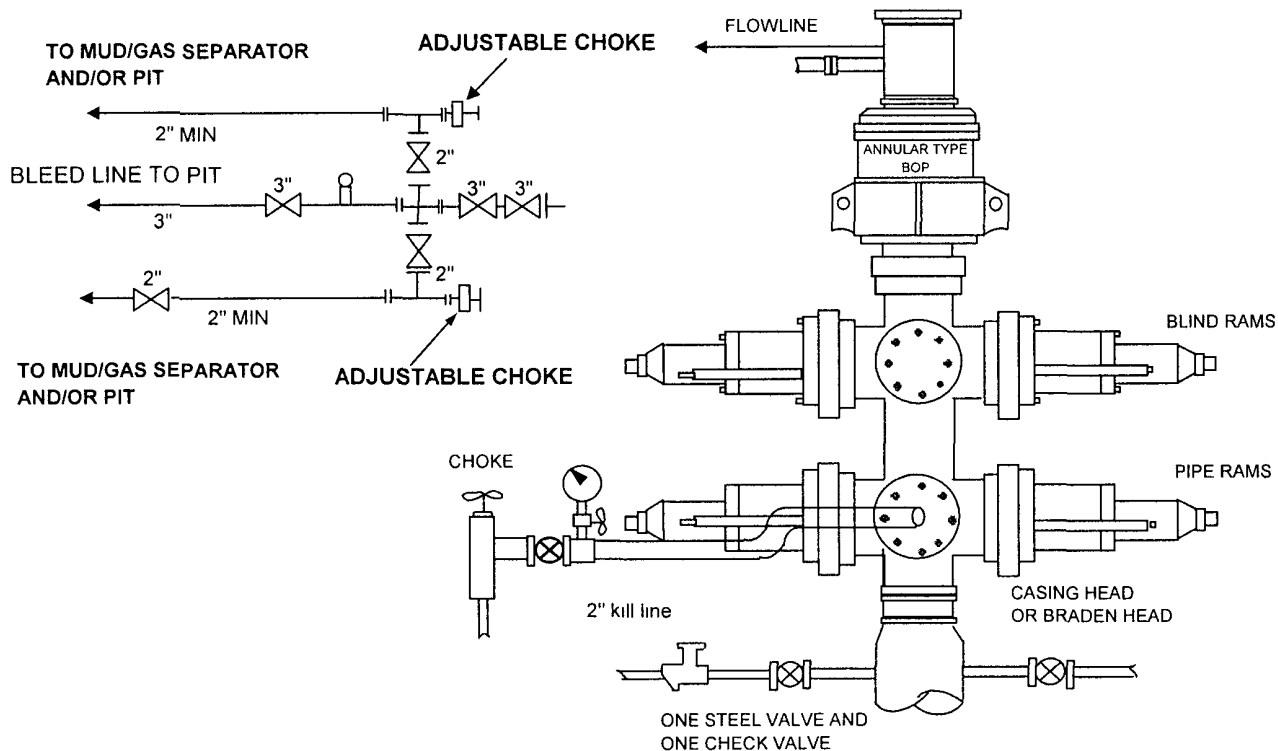
2-16 acres



BOPCO, L. P.

3-M WP BOPE WITH 3-M WP ANNULAR

3 M CHOKE MANIFOLD EQUIPMENT-CONFIGURATION MAY VARY



THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS

- A One double gate Blowout preventer with lower pipe rams and upper blind rams, all hydraulically controlled
- B Opening on preventers between rams to be flanged, studded or clamped and at least two inches in diameter
- C All connections from operating manifold to preventers to be all steel hose or tube a minimum of one inch in diameter
- D The available closing pressure shall be at least 15% in excess of that required with sufficient volume to operate (close, open, and re-close) the preventers
- E All connections to and from preventers to have a pressure rating equivalent to that of the BOPs
- F Manual controls to be installed before drilling cement plug
- G Valve to control flow through drill pipe to be located on rig floor
- H Chokes must be adjustable Choke spool may be used between rams

DIAGRAM 2

MULTI-POINT SURFACE USE PLAN

NAME OF WELL: James Ranch Unit #107H

LEGAL DESCRIPTION - SURFACE: 860' FSL, 990' FWL, Section 36, T22S, R30E, Eddy County, NM.
BHL: 860' FSL, 990' FWL, Section 35, T22S, R30E, Eddy County, New Mexico.

POINT 1: EXISTING ROADS

A) Proposed Well Site Location:

See Exhibit "A" & "C"

B) Existing Roads:

From the junction of State Hwy 128 and WIPP Road, go north on WIPP Road 0.4 miles to lease road. On lease road go 0.3 miles west to lease road, on lease road to north 0.3 miles to lease road, on lease road go west 0.2 miles to lease road, go north to JUR# 66 and to proposed location

C) Existing Road Maintenance or Improvement Plan

See Exhibit "E"

POINT 2: NEW PLANNED ACCESS ROUTE

A) Route Location.

Existing lease roads will be used

B) Width

12' wide

C) Maximum Grade

Grade to match existing topography or as per BLM requirements

D) Turnout Ditches

As required by BLM stipulations

E) Culverts, Cattle Guards, and Surfacing Equipment

If required, culverts and cattle guards will be set per BLM Specs

POINT 3: LOCATION OF EXISTING WELLS

Exhibits "C" indicates existing wells within the surrounding area.

POINT 4: LOCATION OF EXISTING OR PROPOSED FACILITIES

Page 2

- A) Existing facilities within one mile owned or controlled by lessee/operator.

The BOPCO operated JRU #19 Battery is located in the NW quarter of SE quarter of Sec 36, T22S, R30E.

- B) New Facilities in the Event of Production.

New production facilities will not be installed at the new location. Additional separators and heater/treaters will be added as needed at the James Ranch Unit #19 Battery. Proposed flow lines and power lines are displayed in Exhibit "E". Flow lines will follow existing roads to JRU #19 Battery. Power lines will be extended from existing lines and will also follow roads.

- C) Rehabilitation of Disturbed Areas Unnecessary for Production:

Following the construction, those access areas required for continued production will be graded to provide drainage and minimize erosion. The areas unnecessary for use will be graded to blend in with the surrounding topography (see Point 10).

POINT 5: LOCATION AND TYPE OF WATER SUPPLY

- A) Location and Type of Water Supply

Fresh water will be hauled from Johnson Station 50 miles east of Carlsbad, New Mexico or other commercial facilities. Brine water will be hauled from commercial facilities.

- B) Water Transportation System

Water hauling to the location will be over the existing and proposed roads.

POINT 6: SOURCE OF CONSTRUCTION MATERIALS

- A) Materials

On-site caliche will be used. If this is not sufficient, caliche will be hauled from a BLM approved pit.

- B) Land Ownership

Federally Owned

- C) Materials Foreign to the Site

No construction materials foreign to this area are anticipated for this drill site.

- D) Access Roads

See Exhibits "A" & "E"

POINT 7: METHODS FOR HANDLING WASTE MATERIAL

Page 3

A) Cuttings – Closed Loop System

Cuttings will be contained in the steel pits and will be hauled to an approved disposal facility.

B) Drilling Fluids – Closed Loop System

Drilling fluids will be contained in the steel pits, frac tanks, and will be disposed of at licensed disposal facilities

C) Produced Fluids

Water production will be contained in the steel pits

Hydrocarbon fluid or other fluids that may be produced during testing will be retained in test tanks

D) Sewage

Current laws and regulations pertaining to the disposal of human waste will be complied with

E) Garbage

Portable containers will be utilized for garbage disposal during the drilling of this well

F) Cleanup of Well Site

Upon release of the drilling rig, the surface of the drilling pad will be graded to accommodate a completion rig if electric log analysis indicate potential productive zones. Reasonable cleanup will be performed prior to the final restoration of the site

POINT 8: ANCILLARY FACILITIES

None required

POINT 9: WELL SITE LAYOUT

A) Rig Orientation and Layout

Exhibit "D" shows the dimensions of the well pad and closed loop system, and the location of major rig components. Only minor leveling of the well site will be required. No significant cuts or fills will be necessary.

B) Locations of closed loop system and access road

See Exhibits "E"

C) Lining of the Pits

No reserve pit Closed loop system.

POINT 10: PLANS FOR RESTORATION OF THE SURFACE

A) Reserve Pit Cleanup - Not applicable (see Point 9C above).

The pits will be fenced immediately after construction and shall be maintained until they are backfilled. Previous to backfill operations, any hydrocarbon material on the pits' surfaces shall be removed. The fluids and solids contained in the pits shall be backfilled with soil excavated from the site and soil adjacent to the reserve pits. The restored surface of the pits shall be contoured to prevent impoundment of surface water flow. Water-bars will be constructed as needed to prevent excessive erosion. Topsoil, as available, shall be placed over the restored surface in a uniform layer. The area will be seeded according to the Bureau of Land Management stipulations during the appropriate season following restoration.

B) Restoration Plans - Production Developed

In addition, those areas not required for production will be graded to blend with the surrounding topography. Topsoil, as available, will be placed upon those areas and seeded. The portion of the site required for production will be graded to minimize erosion and provide access during inclement conditions. Following depletion and abandonment of the site, restoration procedures will be those that follow under Item C.

C) Restoration Plans - No Production Developed

With no production developed, the entire surface disturbed by construction of the well site will be restored. The site will be contoured to blend with the surrounding topography and provide drainage of surface water. The topsoil, as available, shall be replaced in a uniform layer and seeded according to the Bureau of Land Management's stipulations.

D) Rehabilitation's Timetable

Upon completion of drilling operations, the initial cleanup of the site will be performed as soon as weather and site conditions allow economic execution of the work.

POINT 11: OTHER INFORMATION

Page 5

A) Terrain

Relatively flat.

B) Soil

Caliche and sand

C) Vegetation

Sparse, primarily grasses and mesquite with very little grass

D) Surface Use

Primarily grazing.

E) Surface Water

There are no ponds, lakes, streams or rivers within several miles of the wellsite.

F) Water Wells

The closest known fresh water wells are located in Sec 35 and Sec 24, T22S, R30E and in Sec 5, T23S, R31E. In all cases the wells are over 1 mile from proposed location.

G) Residences and Buildings

None in the immediate vicinity.

H) Historical Sites

None observed

I) Archeological Resources

An archeological survey has been performed for this area and will be submitted to the Bureau of Land Management. Any location or construction conflicts will be resolved before construction begins.

J) Surface Ownership

The well site is on state owned land. There will be no new access roads required for this location.

K) Well signs will be posted at the drilling site

L) Open Pits - None used. Closed loop system

POINT 12: OPERATOR'S FIELD REPRESENTATIVE

Page 6

(Field personnel responsible for compliance with development plan for surface use)

DRILLING

William R. Dannels
Box 2760
Midland, Texas 79702
(432) 683-2277

PRODUCTION

Dean Clemmer
3104 East Green Street
Carlsbad, New Mexico 88220
(505) 887-7329

Carlos Cruz
Box 2760
Midland, Texas 79702
(432) 683-2277

12/30/08

Date

GEG/mac

Gary E. Gerhard
Gary E. Gerhard

OPERATOR CERTIFICATION

I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist, that the statements made in the plan are, to the best of my knowledge, true and correct, and that the work associated with operations proposed herein will be performed by BOPCO, L.P. and it's contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

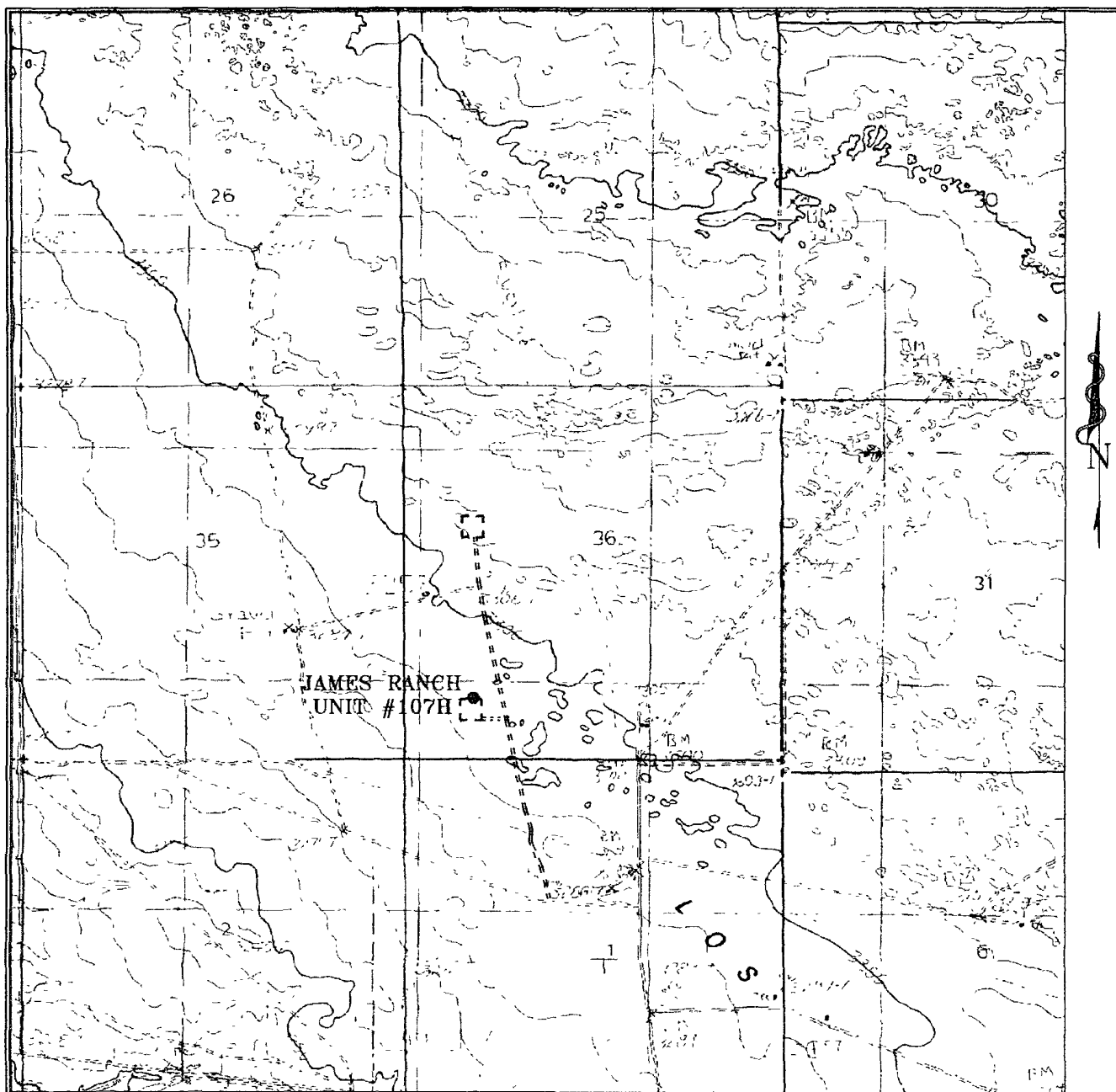
Date

12/30/08

Gary E. Gerhard

Gary E. Gerhard

James Ranch Unit #107H
Exhibit "A"



JAMES RANCH UNIT #107H

860' FSL and 990' FWL

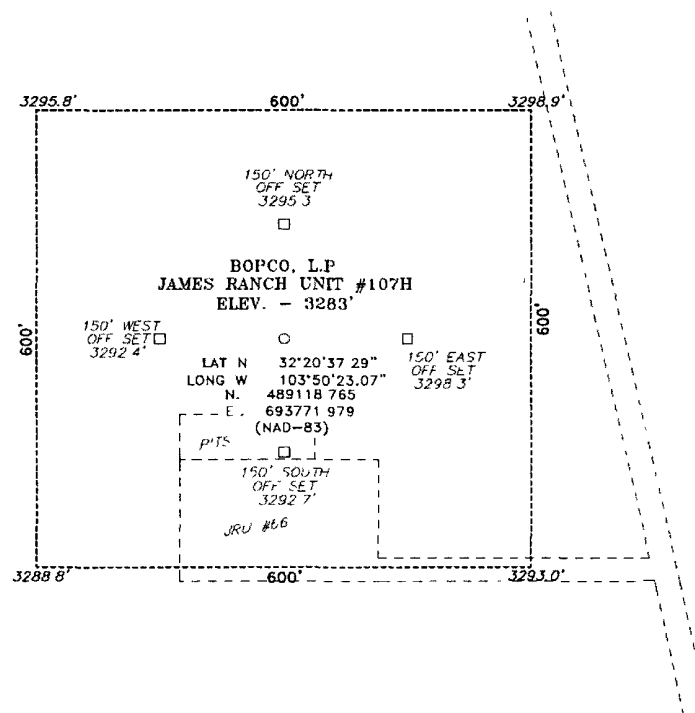
Section 36, Township 22 South, Range 30 East,
N.M.P.M., Eddy County, New Mexico.

James Ranch Unit #107H

Exhibit "B"

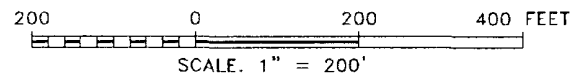


SECTION 36, TOWNSHIP 22 SOUTH, RANGE 30 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



DIRECTIONS TO LOCATION

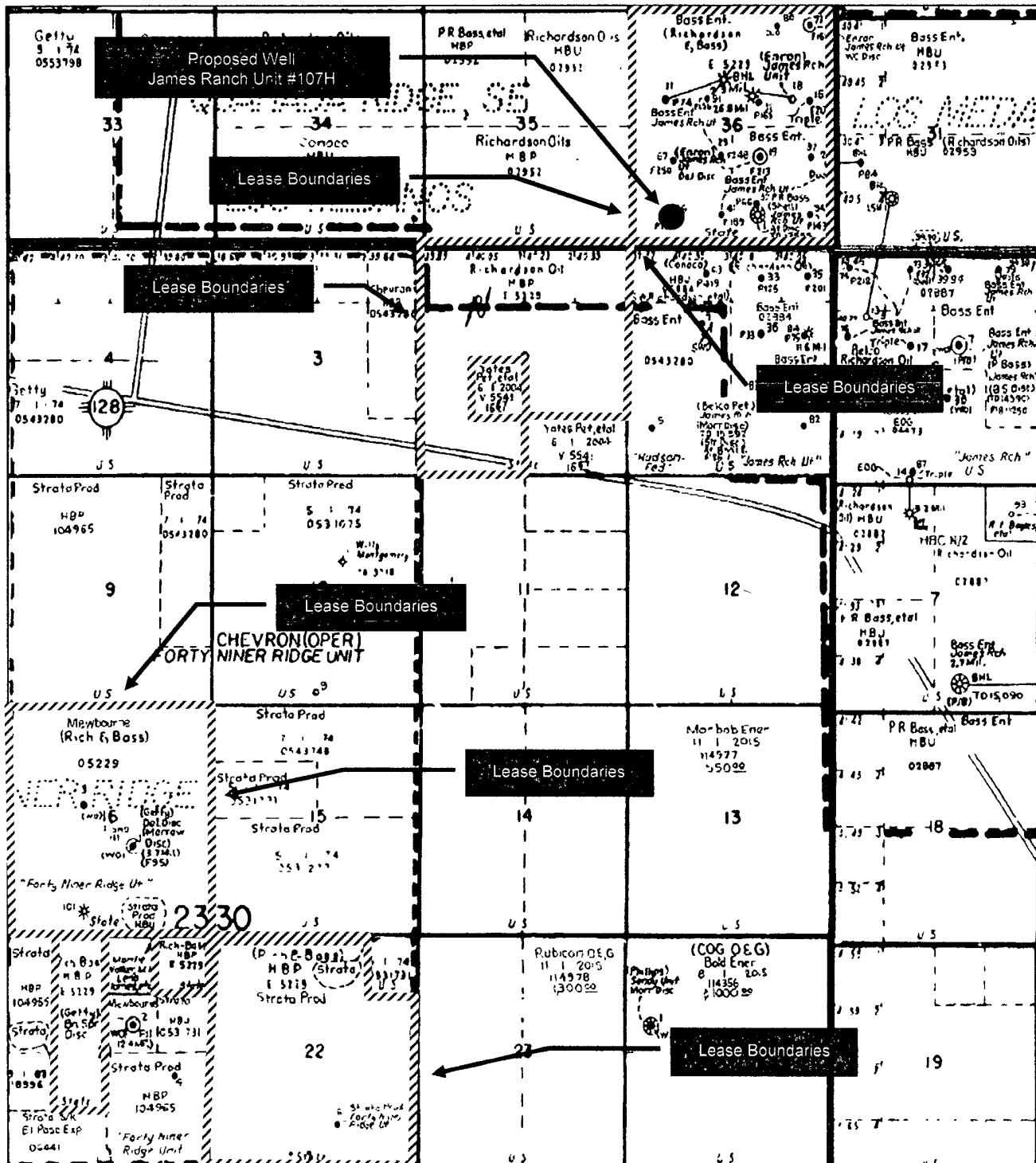
FROM THE JUNCTION OF STATE HWY 128 AND WPP ROAD, GO NORTH ON WPP ROAD 0.4 MILES TO LEASE ROAD, ON LEASE ROAD GO 0.3 WEST TO LEASE ROAD, ON LEASE ROAD GO NORTH 0.3 MILES TO LEASE ROAD, ON LEASE ROAD GO WEST 0.2 MILES TO LEASE ROAD, GO NORTH TO JRJ #66 AND PROPOSED LEASE ROAD



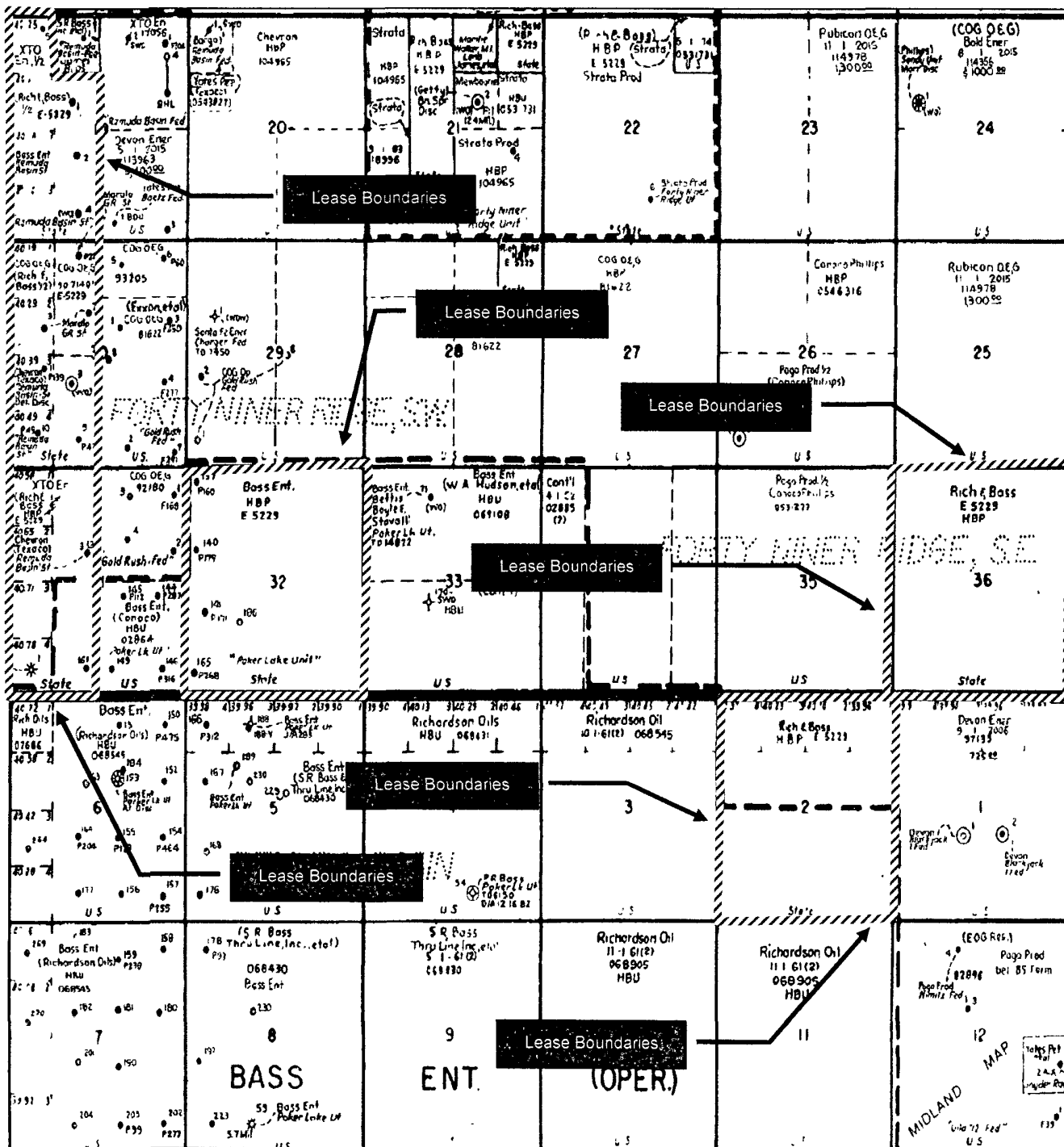
BOPCO, L.P.

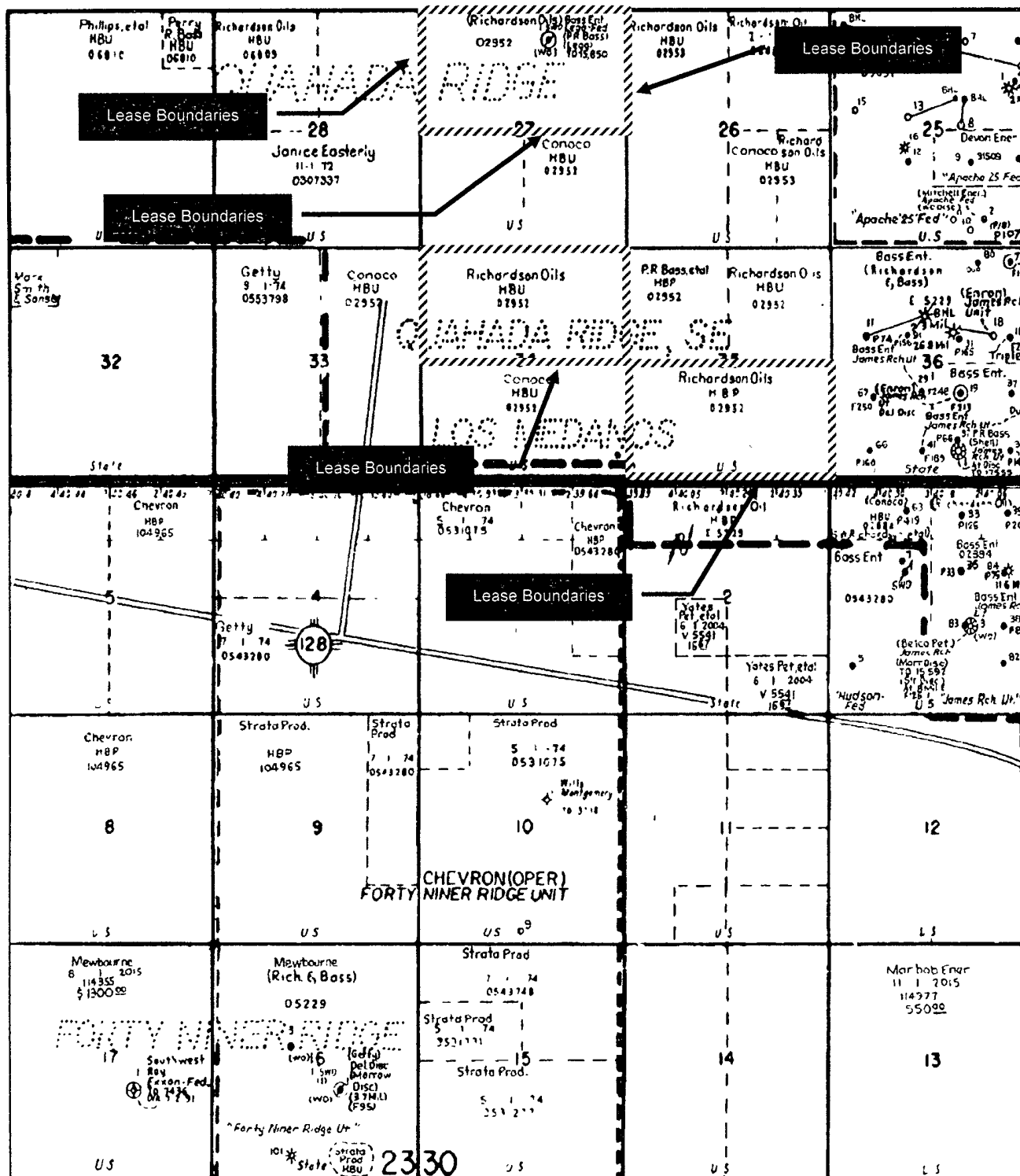
REF JAMES RANCH UNIT #107H / WELL PAD AND TOPO

THE JAMES RANCH UNIT #107H LOCATED 860'
FROM THE SOUTH LINE AND 990' FROM THE WEST LINE OF
SECTION 36, TOWNSHIP 22 SOUTH, RANGE 30 EAST,



James Ranch Unit #107H Exhibit "C"





PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	BOPCO, L.P.
LEASE NO.:	NM-02952A
WELL NAME & NO.:	James Ranch Unit #107H
SURFACE HOLE FOOTAGE:	860' FSL & 990' FWL, Section 36, T. 22 S., R. 30 E.
BOTTOM HOLE FOOTAGE:	660' FSL & 990' FWL
LOCATION:	Section 35, T. 22 S., R 30 E., NMPM
COUNTY:	Eddy County, New Mexico

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

- ☐ **General Provisions**
- ☐ **Permit Expiration**
- ☐ **Archaeology, Paleontology, and Historical Sites**
- ☐ **Noxious Weeds**
- ☒ **Special Requirements**
 - Lesser Prairie Chicken
- ☐ **Construction**
 - Notification
 - Topsoil
 - Reserve Pit
 - Federal Mineral Material Pits
 - Well Pads
 - Roads
- ☐ **Road Section Diagram**
- ☒ **Drilling**
 - R-111-P potash/WIPP
- ☐ **Production (Post Drilling)**
 - Well Structures & Facilities
 - Pipelines
 - Electric Lines
- ☐ **Interim Reclamation**
- ☐ **Final Abandonment/Reclamation**

I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

V. SPECIAL REQUIREMENT(S)

Timing Limitation Stipulation/Condition of Approval for Lesser Prairie-Chicken: Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5972 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall stockpile the topsoil of the well pad. The topsoil to be stripped is approximately 8 inches in depth. The topsoil shall not be used to backfill the reserve pit and will be used for interim and final reclamation.

C. RESERVE PITS

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT

If the operator elects to surface the access road and/or well pad, mineral materials extracted during construction of the reserve pit may be used for surfacing the well pad and access road and other facilities on the lease.

Payment shall be made to the BLM prior to removal of any additional federal mineral materials from any site other than the reserve pit. Call the Carlsbad Field Office at (575) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.

The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. ON LEASE ACCESS ROADS

Road Width

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed thirty (30) feet.

Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning

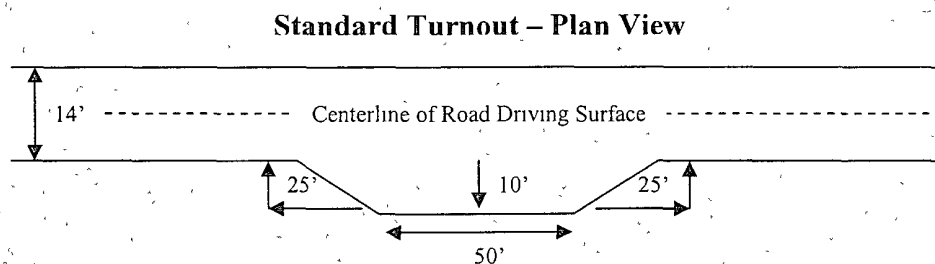
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Ditching

Ditching shall be required on both sides of the road.

Turnouts

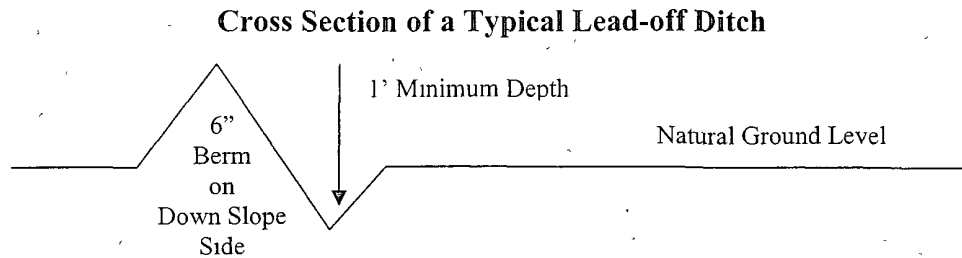
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:



Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill out sloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

$$400 \text{ foot road with } 4\% \text{ road slope: } \frac{400'}{4\%} + 100' = 200' \text{ lead-off ditch interval}$$

Culvert Installations

Appropriately sized culvert(s) shall be installed at the deep waterway channel flow crossing.

Cattleguards

An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s).

Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations.

A gate shall be constructed and fastened securely to H-braces.

Fence Requirement

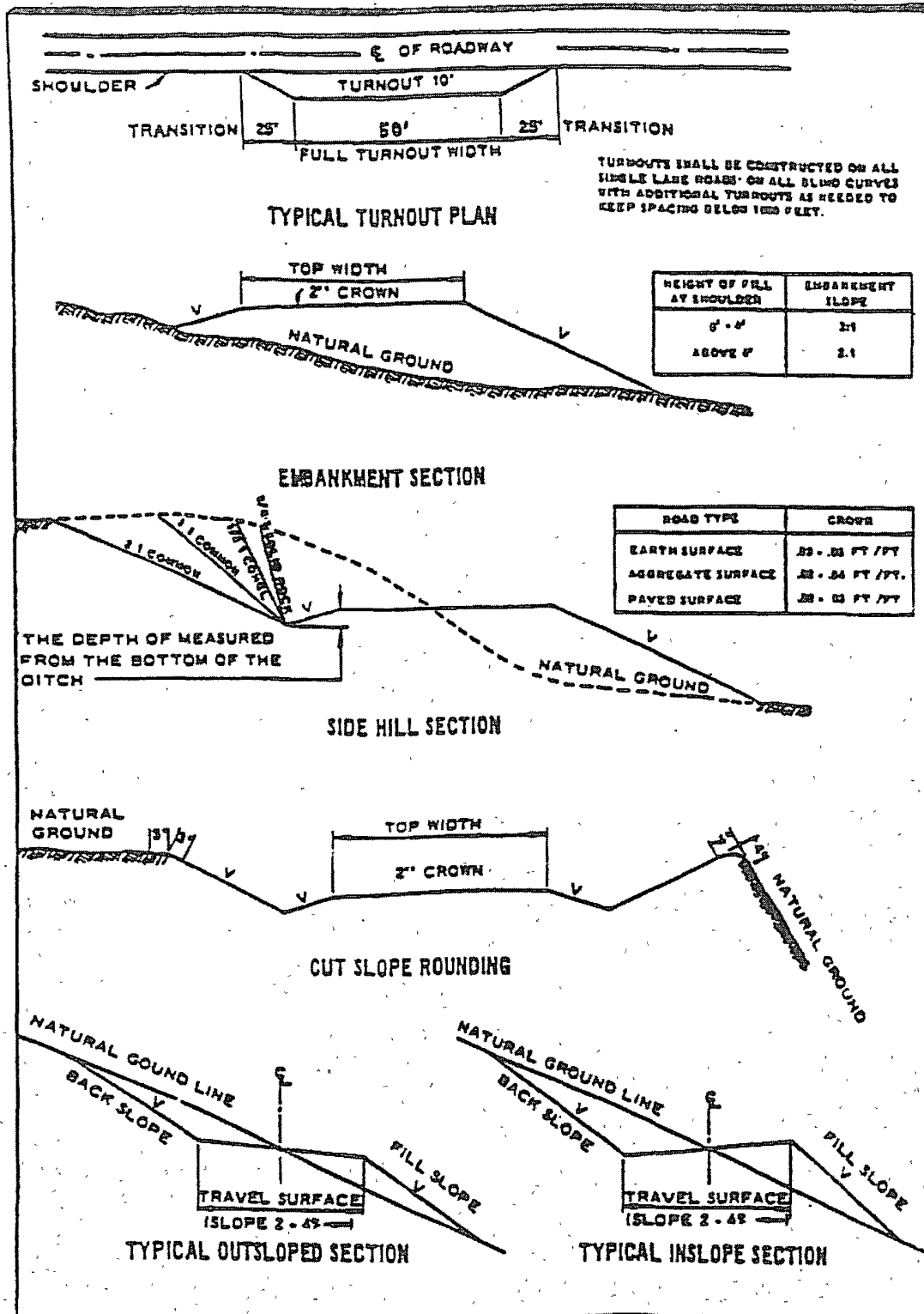
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Figure 1 – Cross Sections and Plans For Typical Road Sections



VII. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

- a. Spudding well
- b. Setting and/or Cementing of all casing strings
- c. BOPE tests

☒ **Eddy County**

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
(575) 361-2822

1. **Although Hydrogen Sulfide has not been reported in this section, it is always a potential hazard. If Hydrogen Sulfide is encountered, please report measured amounts and formations to the BLM.**
2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
4. Gamma-Ray/Neutron logs shall be run from the base of the Salado formation to the surface. The logs shall be run at a speed which allows the logs to be legible and no faster than manufacturer of the logging tools recommended speed. (R-111-P area only)

B. CASING

Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work. Failure to obtain approval prior to work will result in an Incident of Non-Compliance being issued.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

R-111-P potash/WIPP

High cave/karst.

Possible water flows in the Salado Group and Castile formation.

Possible lost circulation and water flows in the Delaware and Bone Spring formations.

1. The 13-3/8 inch surface casing shall be set **at approximately 591 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt)** and cemented to the surface. **If the salt is encountered at a shallower depth, the casing is to be set a minimum of 15 feet above the salt.**
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
 - b. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.**
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.

Intermediate casing to be filled every 1000 feet to meet minimum BLM collapse safety factor.

2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:

- ☒ Cement to surface. If cement does not circulate see B.1.a, c-d above.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to potash.

Centralizers required on horizontal leg, must be type for horizontal service and minimum of one every other joint.

3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
 - a. First stage to DV tool, cement shall:
 - ☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office, before proceeding with second stage cement job.
 - b. Second stage above DV tool, cement shall:
 - ☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office.
4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
5. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M)** psi.
3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 9-5/8" intermediate casing shoe shall be **3000 (3M)** psi.
4. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. The tests shall be done by an independent service company.
 - b. The results of the test shall be reported to the appropriate BLM office.

- c. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.
- e. **Effective November 1, 2008, no variances will be granted on reduced pressure tests on the surface casing and BOP/BOPE. Onshore Order 2 requirements will be in effect.**

D. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

E. WIPP Requirements

The proposed well is located more than 330' of the WIPP Land Withdrawal Area boundary. As a result, BOPCO, L. P. is requested, but not required to submit daily logs and deviation survey information to the Department of Energy per requirements of the Joint Powers Agreement. Any future entry into the well for purposes of completing additional drilling will require supplemental information.

BOPCO, L. P. can email the required information to Ms. Susan McCauslin at susan.mccauslin@wipp.ws or fax to her attention at 575-234-7061.

WWI 020709

VIII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Containment Structures

The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

Painting Requirement

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color
Shale Green, Munsell Soil Color Chart # 5Y 4/2

B. PIPELINES

STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

A copy of the APD and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to activity of the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. The holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. The holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:

a. Activities of the holder including, but not limited to construction, operation, maintenance, and termination of the facility.

b. Activities of other parties including, but not limited to:

- (1) Land clearing.
- (2) Earth-disturbing and earth-moving work.
- (3) Blasting.
- (4) Vandalism and sabotage.

c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars (\$1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder

of any responsibility as provided herein.

6. All construction and maintenance activity will be confined to the authorized right-of-way width of 25 feet.

7. No blading or clearing of any vegetation will be allowed unless approved in writing by the Authorized Officer.

8. The holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky or dune areas, the pipeline will be "snaked" around hummocks and dunes rather than suspended across these features.

9. The pipeline shall be buried with a minimum of 24 inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.

10. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.

13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline.

14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.

15. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

C. ELECTRIC LINES

STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES

A copy of the APD and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to

the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. There will be no clearing or blading of the right-of-way unless otherwise agreed to in writing by the Authorized Officer.

5. Powerlines shall be constructed in accordance to standards outlined in "Suggested Practices for Raptor Protection on Powerlines, " Raptor Research Foundation, Inc., 1981. The holder shall assume the burden and expense of proving that pole designs not shown in the above publication are "raptor safe." Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.

6. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

7. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.

8. Upon cancellation, relinquishment, or expiration of this grant, the holder shall comply with those abandonment procedures as prescribed by the Authorized Officer.

9. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this grant, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.

10. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer.

after consulting with the holder.

11. Special Stipulations:

- For reclamation remove poles, lines, transformer, etc. and dispose of properly.
- Fill in any holes from the poles removed.

IX. INTERIM RECLAMATION & RESERVE PIT CLOSURE

A. INTERIM RECLAMATION

If the well is a producer, interim reclamation shall be conducted on the well site in accordance with the orders of the Authorized Officer. The operator shall submit a Sundry Notices and Reports on Wells (Notice of Intent), Form 3160-5, prior to conducting interim reclamation.

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

The operators should work with BLM surface management specialists to devise the best strategies to reduce the size of the location. Any reductions should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

Seed Mixture for LPC Sand/Shinnery Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

<u>Species</u>	<u>lb/acre</u>
Plains Bristlegrass	5lbs/A
Sand Bluestem	5lbs/A
Little Bluestem	3lbs/A
Big Bluestem	6lbs/A
Plains Coreopsis	2lbs/A
Sand Dropseed	1lbs/A

**Four-winged Saltbush 5lbs/A

* This can be used around well pads and other areas where caliche cannot be removed.

*Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed
(Insert Seed Mixture Here)

X. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

Upon abandonment of the well and/or when the access road is no longer in service the Authorized Officer shall issue instructions and/or orders for surface reclamation and restoration of all disturbed areas.

On private surface/federal mineral estate land the reclamation procedures on the road and well pad shall be accomplished in accordance with the private surface land owner agreement.