V-Door E/NE OCD-ARTESIA APR 21 2009 ATS-09-184

345 WIPP R-111-POTASH

Split Estate

Form 3160-3
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

5 Lease Serial No.
~~E5229~~ NMO2952A CR 1/14/09

6 If Indian, Allotee or Tribe Name

1a. Type of work ☑ DRILL ☐ REENTER

7 If Unit or CA Agreement, Name and No

1b Type of Well ☑ Oil Well ☐ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone

8 Lease Name and Well No
James Ranch Unit #106H (30-015-37063)

2 Name of Operator
BOPCO, L. P

9 API Well No
30-015-37063

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 Ridge SE (Delaware)

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

At surface **NWSW, UL L, 1595' FSL, 1096' FWL, Lat N32.34534, Lon W103.83939**

At proposed prod zone **2100 FSL,990 FWL,Sec 35-R22S-R30E,Lat N32.347139,Lon W103.857092**

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 Northeast of Malaga, NM

12 County or Parish
Eddy County

13 State
NM

15 Distance from proposed* location to nearest property or lease line, ft (Also to nearest drlg unit line, if any)	16 No of acres in lease	17 Spacing Unit dedicated to this well
330'	**6406'**	**200**
18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft	19 Proposed Depth	20 BLM/BIA Bond No. on file
250'	12575' ~~12,360'~~ **MD, 7209' (TVD)** MAX TVD 7284'	**COB000050**
21 Elevations (Show whether DF, KDB, RT, GL, etc)	22 Approximate date work will start*	23 Estimated duration
3296' GL	**03/01/2009**	**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	Name *(Printed/Typed)*	Date
Annette Childers	**Annette Childers**	1-9-09

Title **Administrative Assistant**

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
/s/ Linda S. C. Rundell	/s/ Linda S. C. Rundell	APR 17 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 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)

CARLSBAD CONTROLLED WATER BASIN

UNORTHODOX LOCATION

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

SEE ATTACHED FOR CONDITIONS OF APPROVAL

B O P C O, L.P.

P. O. Box 2760
Midland, Texas 79702

432-683-2277 **FAX-432-687-0329**

January 9, 2009

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 - 1595' FSL, 1096' 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
OM B 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
☑ Oil Well ☐ ☐ Gas Well ☐☐ ☐ Other

2 Name of Operator **BOPCO, L. P.**

3a Address **P. O. Box 2760 Midland, TX 79702**

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

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

NWSW, UL L, 1595' FSL, 1096' FWL, Sec 36, T22S, R30E, Mer NMP
Lat N32.34534, Lon W103.83939

5 Lease Serial No **E5229**

6 If Indian, Allottee or Tribe Name

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

8 Well Name and No. **James Ranch Unit #106H**

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			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☑ Other **Change flowline route**
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ 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 recomplete 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 recompletion 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 #106H 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 Annette Childers Date 1-15-09

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by /s/ Linda S. C. Rundell Title STATE DIRECTOR Date APR 17 2009

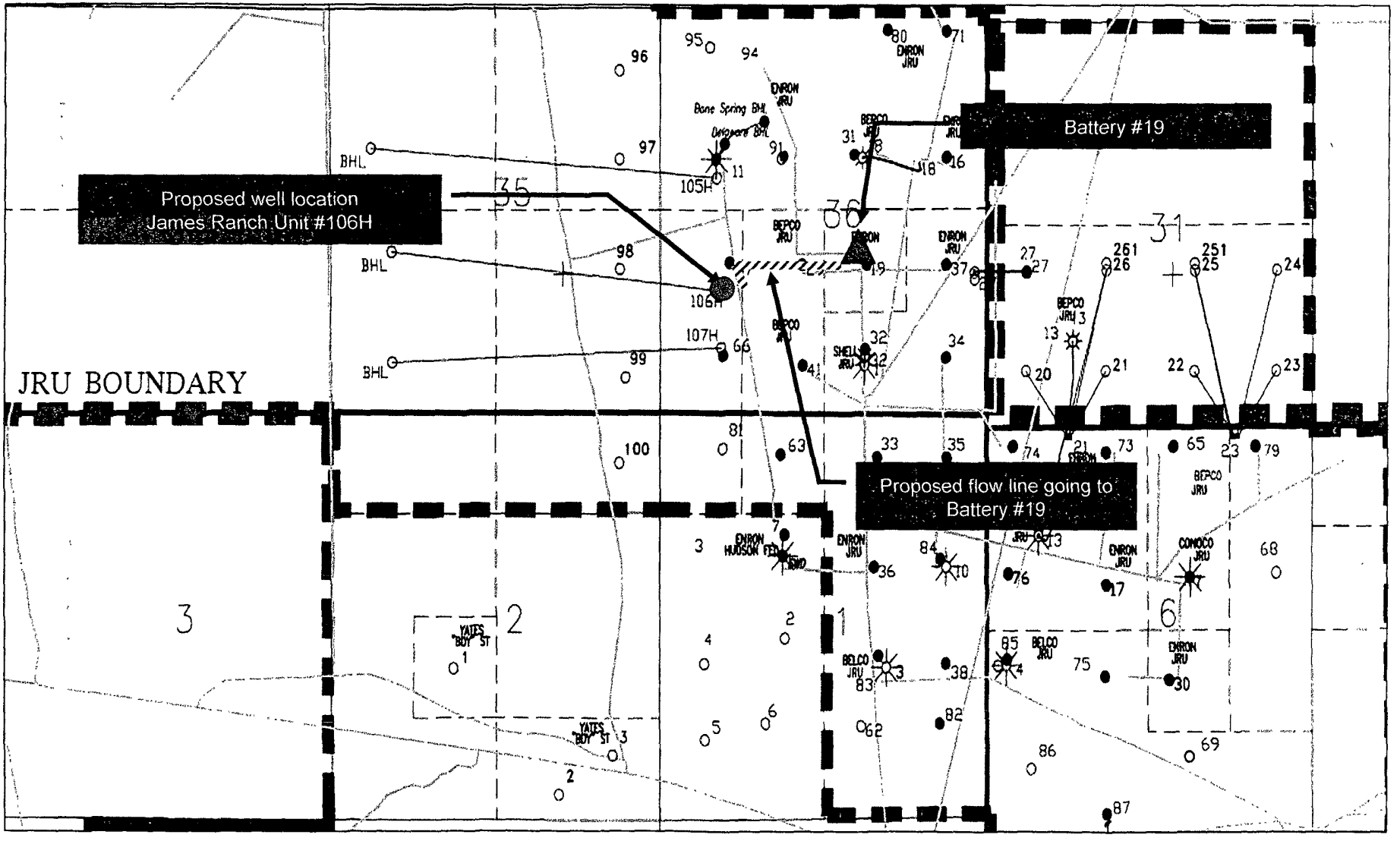
Conditions of approval, if any, are attached Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon

Office NM STATE OFFICE

Title 18 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)

James Ranch Unit #106H
Exhibit "E"



DISTRICT I
1625 N. French Dr., Hobbs, NM 88240

DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
1220 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
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-015-37063	50443	Quahada Ridge, SE (Delaware)

Property Code	Property Name	Well Number
306407	JAMES RANCH UNIT	106H

OGRID No.	Operator Name	Elevation
260737	BOPCO, L.P.	3296'

Surface Location

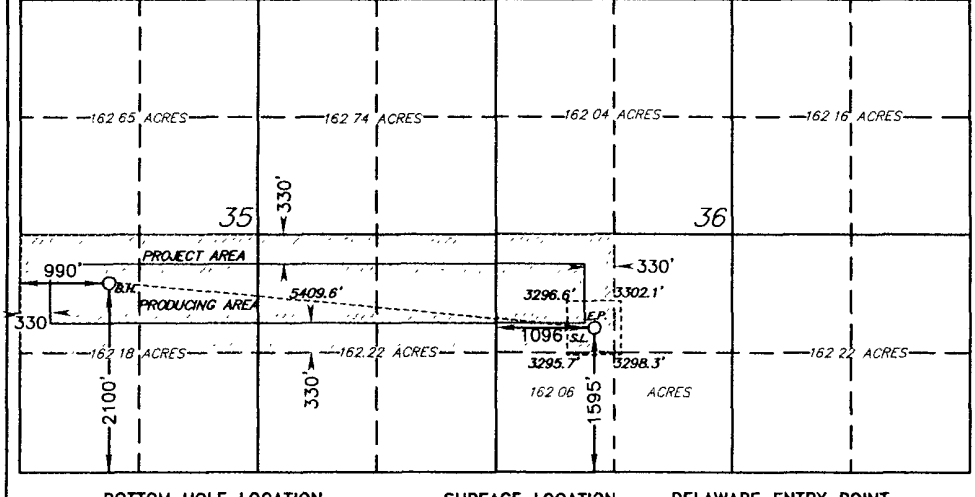
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	36	22 S	30 E		1595	SOUTH	1096	WEST	EDDY

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
L	35	22 S	30 E		2100	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°20'49.70"
LONG - W103°51'25.53"
SPC- N.: 490348.131
E.: 688408.252
(NAD-83)

SURFACE LOCATION
LAT - N32°20'44.57"
LONG - W103°50'21.82"
SPC- N.: 489854.073
E.: 693876.291
(NAD-83)

DELAWARE ENTRY POINT
LAT - N32°20'43.23"
LONG - W103°50'21.82"
SPC- N.: 489718.984
E.: 693876.324
(NAD-83)

SCALE - 1" = 2000'

OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Gary E. Gerhard 1/9/09
Signature Date

Gary E. Gerhard
Printed Name

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervison, and that the same is true and correct to the best of my belief.

JANUARY 5, 2009
Date Surveyed

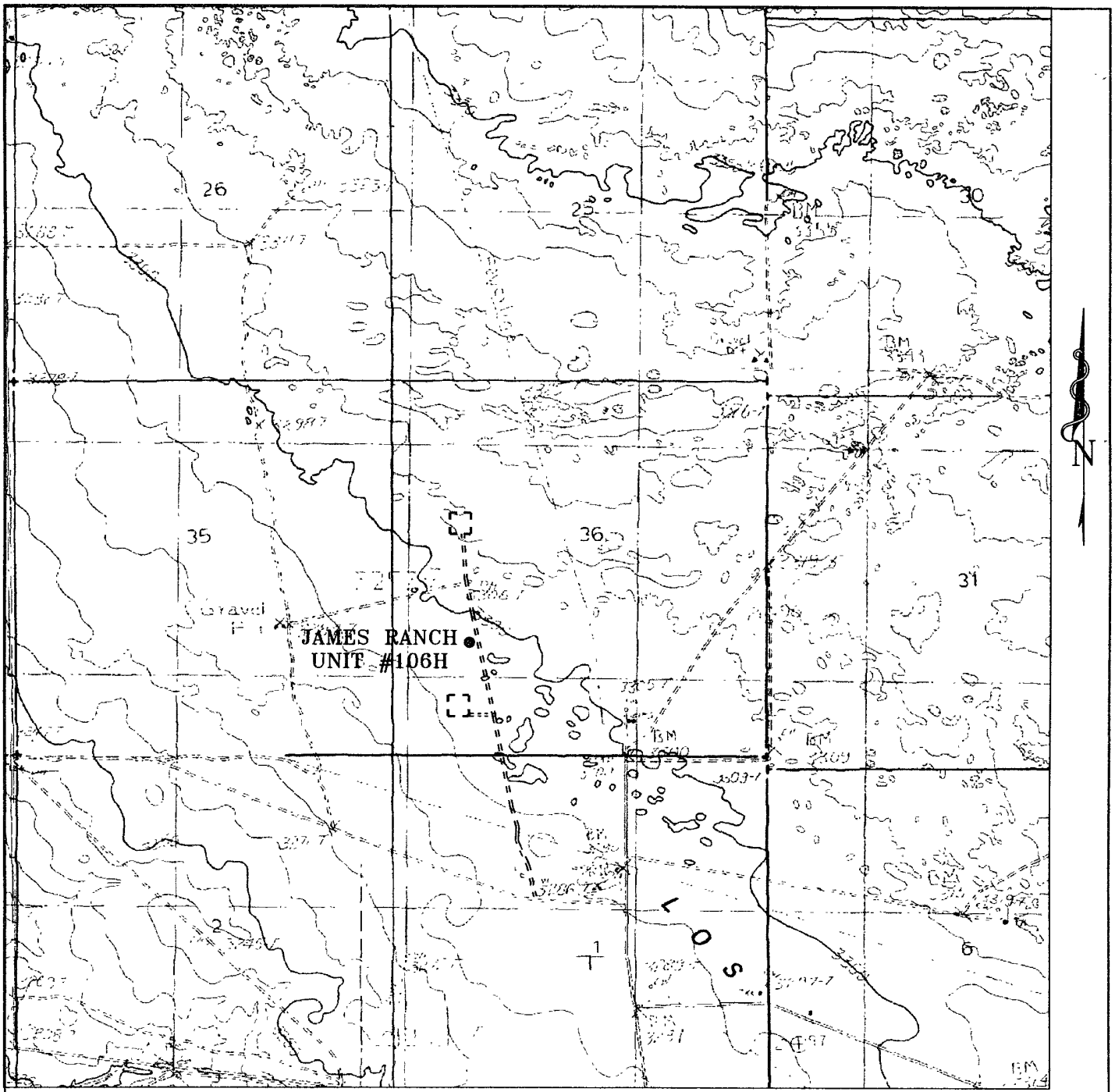
Signature & Seal of Professional Surveyor

GARY L. JONES
NEW MEXICO
7977
REGISTERED PROFESSIONAL LAND SURVEYOR

W.O. [illegible]

Certificate No. Gary L. Jones 7977

BASIN SURVEYS



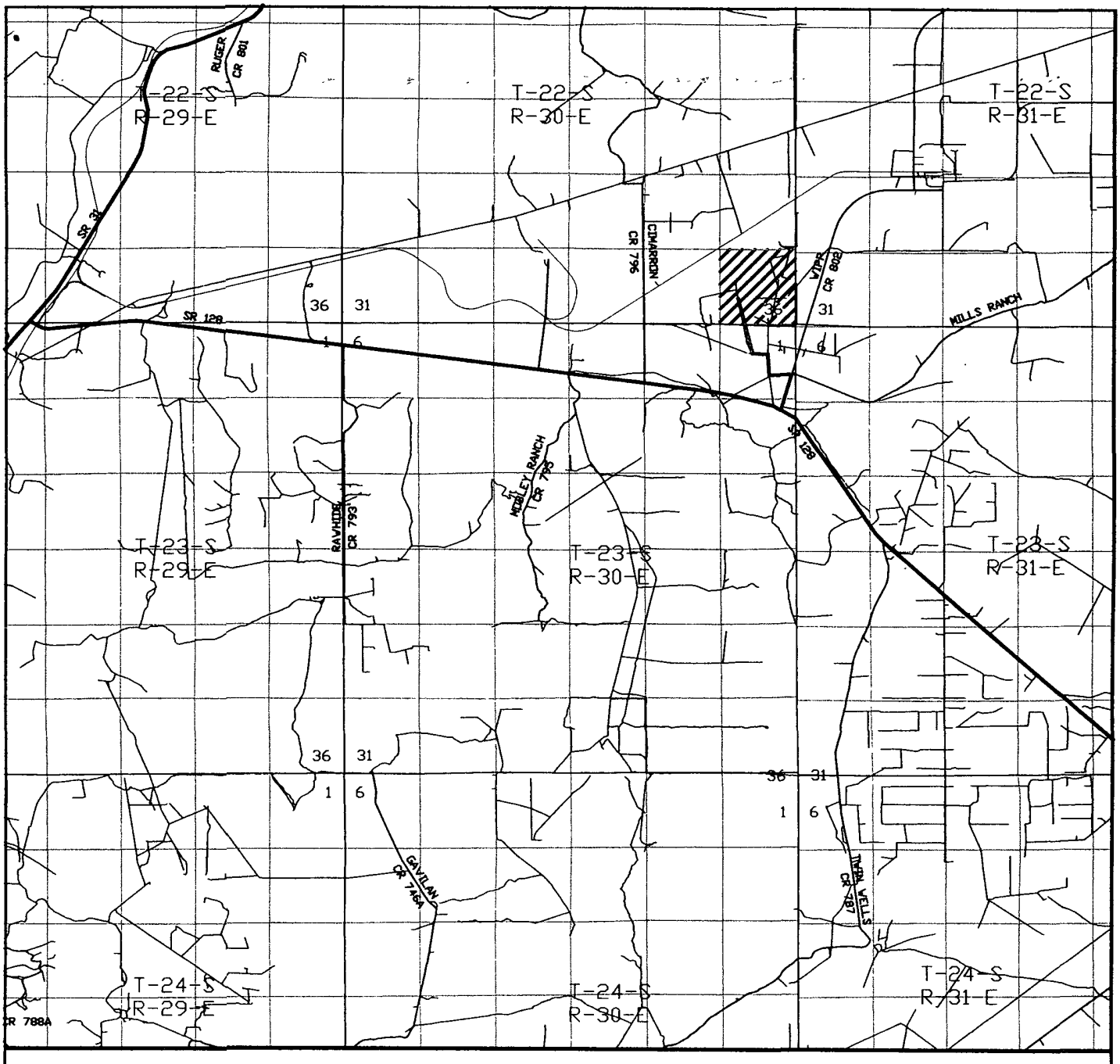
JAMES RANCH UNIT #106H
1595' FSL and 1096' FWL
Section 36, Township 22 South, Range 30 East,
N.M.P.M., Eddy County, New Mexico.

basin surveys
focused on excellence in the oilfield

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 20994
Survey Date	01-05-2009
Scale	1" = 2000'
Date	01-08-2009

BOPCO, L.P.



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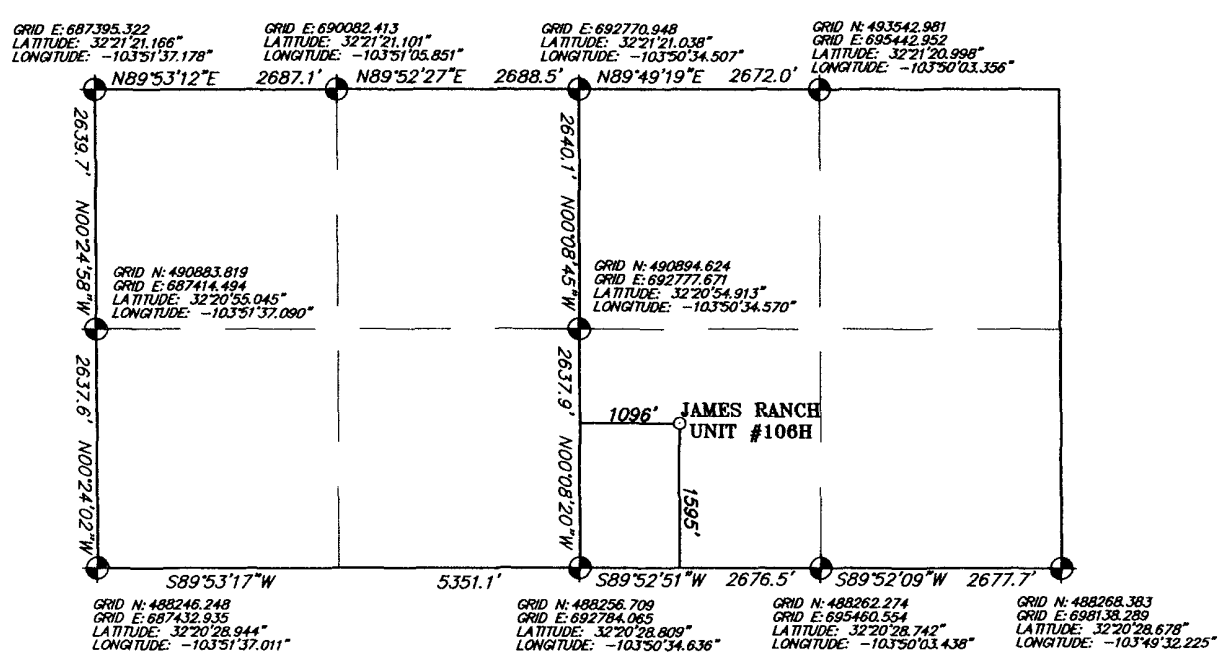
W O Number	JMS 20994
Survey Date.	01-05-2009
Scale	1" = 2000'
Date	01-08-2009

BOPCO, L.P.

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



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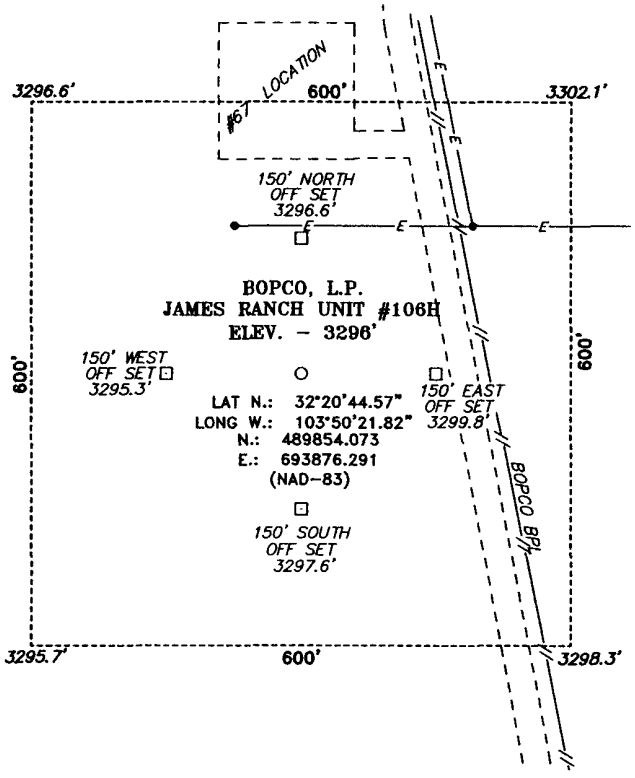
SECTION 36, TOWNSHIP 22 SOUTH, RANGE 30 EAST, N.M.P.M.,

EDDY COUNTY, **NEW MEXICO.**



200 0 200 400 FEET

SCALE: 1" = 200'

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 PROPOSED LOCATION.

BOPCO, L.P.

REF: JAMES RANCH UNIT #106H / WELL PAD AND TOPO

THE JAMES RANCH UNIT #106H LOCATED 1595' FROM THE SOUTH LINE AND 1096' 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: 20994	Drawn By: J. SMALL		
Date: 01-08-2009	Disk: 20994 JMS	Survey Date: 01-05-2009	Sheet 1 of 1 Sheets

Surface casing 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 Tuned Lite cement system in the 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 R111 Potash area.

The surface location is unorthodox, however the bottom hole location is 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 #106H
LEGAL DESCRIPTION - SURFACE: 1595' FSL, 1096' FWL, Section 36, T22S, R30E, Eddy County, NM.
BHL: 2100' 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 3321' (estimated)
GL 3296'

FORMATION	ESTIMATED TOP FROM KB TVD	MD	ESTIMATED SUB-SEA TOP	BEARING
T/Rustler	231'	233'	+ 3090'	Barren
B/Rustler	556'	558'	+ 2765'	Barren
T/Salt	665'	667'	+ 2656'	Barren
B/Salt	3539'	3541'	- 218'	Barren
T/Lamar Lime	3786'	3788'	- 465'	Barren
T/Ramsey	3842'	3844'	- 521'	Oil/Gas
T/Lower Cherry Canyon	5950'	5952'	- 2629'	Oil/Gas
KOP (Kick Off Point)	6812'	6812'	- 3489'	N/A
T/Brushy Canyon "U" Sand	7138'	7171'	- 3817'	Oil/Gas
EOC Target	7289'	7569'	- 3968'	Oil/Gas
TD (end of lateral)	7209'	12,575'	- 3888'	Oil/Gas

POINT 3: CASING PROGRAM

TYPE	INTERVALS (MD)	Hole Size	PURPOSE	CONDITION
20"	0' - 60'	24"	Conductor	Contractor Discretion
13-3/8", 48#, H-40, ST&C	0' - ~~657'~~ 610' Set 600'	17-1/2"	Surface	New
9-5/8", 36#, J-55, 8RD, LT&C	0' - 3308'	12-1/4"	Intermediate	New
9-5/8", 40#, J-55, LT&C	3308'- 3808'	12-1/4"	Intermediate	New
5-1/2", 17#, P-110, LT&C	0' - 6560'	8-3/4"	Production	New
5-1/2", 17#, P-110, Ultra Flush JT	6560' - 12,575'	8-3/4"	Production	New

CASING DESIGN SAFETY FACTORS:

TYPE	TENSION	COLLAPSE	BURST
13-3/8", 48#, H-40, ST&C	11.8	2.56	2.63
9-5/8", 36#, J-55, LT&C	3.91	1.17	1 04
9-5/8", 40#, J-55, LT&C	30.26	1.30	1.16
5-1/2", 17#, J-55, LT&C	1.62	1 65	1 90
5-1/2", 17#, P110, Ultra Flush Jt	6.10	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 a 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. Back 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.

See COA

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' - ~~657'~~ 610'	FW Spud Mud	8 5 – 9.2	38-70	NC	NC	NC	10.0
610' ~~657'~~ - 3808'	Brine Water	9.8 – 10 2	28-30	NC	NC	NC	9 5 – 10.5
3808' - 6720'	FW/Gel	8.7 – 9.0	28-36	NC	NC	NC	9.5 – 10 0
6720' - 12,575'	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 (±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 thru curve.

C) CONVENTIONAL CORING

None anticipated.

D)CEMENT ← See COA

INTERVAL	AMOUNT SXS	FT OF FILL	TYPE	GALS/SX	PPG	FT^3/SX
SURFACE:						
Lead: 0 – 357' (100% excess Circ to surface)	300	357	EconoCem-HLC + 2.7 #/sk Salt	10.25	12.8	1.88
Tail: 357' – 657' (100% excess)	340	300	HalCem-C + 2% $CaCl_2$	6.39	14.8	1.35
INTERMEDIATE:						
Lead: 0' – 3308' (100% excess Circ to surface)	725	3308	EconoCem-C + 0.125 pps Poly-e-flake	16.62	11.5	2.78
Tail: 3308' – 3808' (100% excess)	262	500	HalCem-C + 1% $CaCl_2$	6.36	14 8	1.34
PRODUCTION:						
Stage 1						
Lead: 6000' – 6562'	70	562	Halco Tuned Lite	14.4	9.7	3.13
(50% excess)						
Tail. 6562' – 12,575' (50% excess)	900	6013	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'	910	5900	EconoCem-C	14 3	11 9	2.46
(50% excess)						
Tail. 5900' – 6000'	30	100	Class "C" Neat	6.34	14 8	1 34
(50% excess)						

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 6812' at which point a directional hole will be kicked off and drilled at an azimuth of 276.56°, building angle at 12.00°/100' to a max angle of 90.91° at a TVD of 7289' (MD 7569'). This 90.91° angle will be maintained to a MD of 12,589' or TVD of 7211'.

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 3844'-7190' TVD. No H_2S 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
December 31, 2008

BEPCO, L.P.

Eddy Co., New Mexico (Nad 83)
James Ranch Unit #106H
James Ranch Unit #106H
Lateral #1

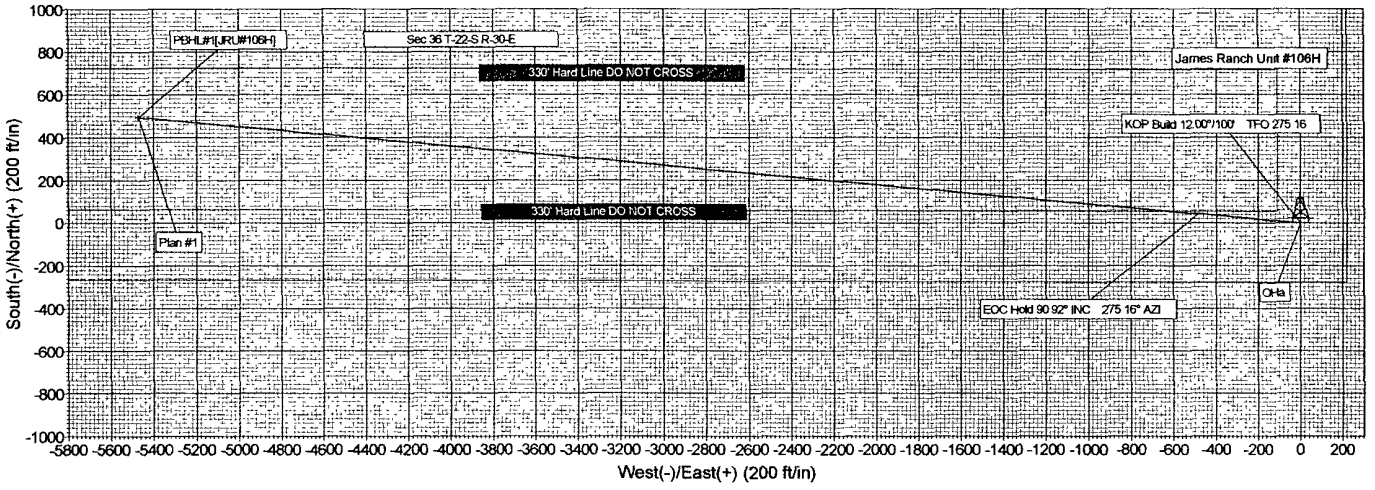
Plan: Plan #1

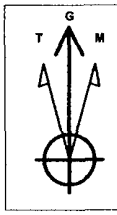
Standard Planning Report

09 January, 2009

Project: Eddy Co , New Mexico (Nad 83)
Site: James Ranch Unit #106H
Well: James Ranch Unit #106H
Wellbore: Lateral #1
Plan: Plan #1 (James Ranch Unit #106H/Lateral #1)

BLACK VIPER ENERGY SERVICES, LTD.





Azimuths to Grid North
True North -0.26°
Magnetic North 7.74°
Magnetic Field Strength 48961.8nT
Dip Angle 60.33°
Date 12/18/2008
Model IGRF200510

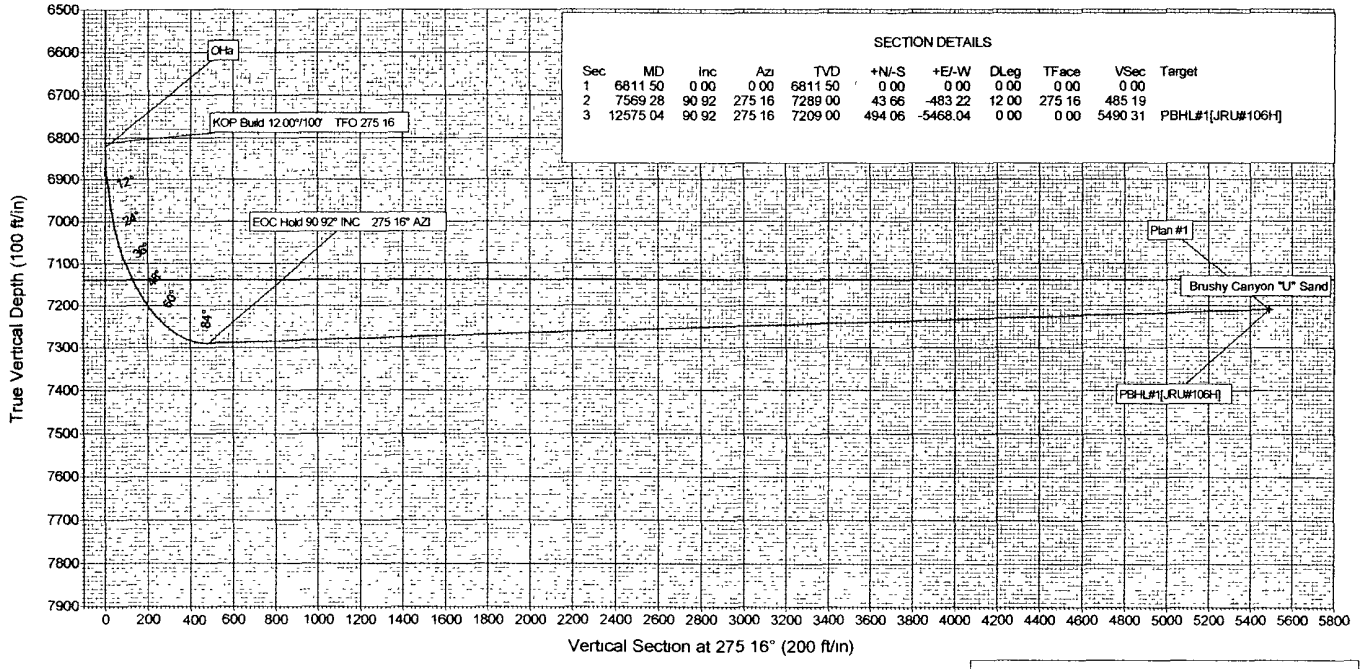
ANNOTATIONS

TVD	MD	Annotation
6811.50	6811.50	KOP Build 12.00°/100' TFO 275.16
7289.00	7569.28	EOC Hold 90.92° INC 275.16° 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



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	6811.50	0.00	0.00	6811.50	0.00	0.00	0.00	0.00	0.00	
2	7569.28	90.92	275.16	7289.00	43.66	-483.22	12.00	275.16	485.19	
3	12575.04	90.92	275.16	7209.00	494.06	-5468.04	0.00	0.00	5490.31	PBHL#1[JRU#106H]

Plan: Plan #1 (James Ranch Unit #106H/Lateral #1)
Created By: Heather Vannoy Date: January 09 2009

Black Viper Energy

Planning Report

Database:	EDM 2003 14 Server Db	**Local Co-ordinate Reference:**	Site James Ranch Unit #106H
Company:	BEPCO, 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 #106H	**North Reference:**	Grid
Well:	James Ranch Unit #106H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Lateral #1		
Design:	Plan #1		

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 #106H

Site Position:		**Northing:**	489,854 07 ft	**Latitude:**	32° 20' 44 557 N
From:	Map	**Easting:**	693,876 29 ft	**Longitude:**	103° 50' 21 835 W
Position Uncertainty:	0 00 ft	**Slot Radius:**	"	**Grid Convergence:**	0 26 °

Well James Ranch Unit #106H

Well Position	**+N/-S**	0 00 ft	**Northing:**	489,854 07 ft	**Latitude:**	32° 20' 44 557 N
	+E/-W	0 00 ft	**Easting:**	693,876 29 ft	**Longitude:**	103° 50' 21 835 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 01	60 33	48,962

Design Plan #1

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	6,811 50

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0 00	0 00	0 00	275 16

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
6,811 50	0 00	0 00	6,811 50	0 00	0 00	0 00	0 00	0 00	0 00	
7,569 28	90 92	275 16	7,289 00	43 66	-483 22	12 00	12 00	0 00	275 16	
12,575 04	90 92	275 16	7,209 00	494 06	-5,468 04	0 00	0 00	0 00	0 00	PBHL#1[JRU#106H]

Database:	EDM 2003.14 Server Db	**Local Co-ordinate Reference:**	Site James Ranch Unit #106H
Company:	BEPCO, 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 #106H	**North Reference:**	Grid
Well:	James Ranch Unit #106H	**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)
6,811 50	0 00	0 00	6,811 50	0 00	0 00	0 00	0 00	0 00	0 00
KOP Build 12.00°/100' :: TFO 275.16									
6,840 00	3 42	275 16	6,839 98	0 08	-0 85	0 85	12 00	12 00	0 00
6,870 00	7 02	275 16	6,869 85	0 32	-3 56	3 58	12 00	12 00	0 00
6,900 00	10 62	275 16	6,899 49	0 74	-8 14	8 18	12 00	12 00	0 00
6,930 00	14 22	275 16	6,928 79	1 32	-14 57	14 63	12 00	12 00	0 00
6,960 00	17 82	275 16	6,957 62	2 06	-22 81	22 90	12 00	12 00	0 00
6,990 00	21 42	275 16	6,985 87	2 97	-32 84	32 97	12 00	12 00	0 00
7,020 00	25 02	275 16	7,013 44	4 03	-44 62	44 80	12 00	12 00	0 00
7,050 00	28 61	275 16	7,040 21	5 25	-58 09	58 33	12 00	12 00	0 00
7,080 00	32 21	275 16	7,066 08	6 62	-73 21	73 51	12 00	12 00	0 00
7,110 00	35 81	275 16	7,090 94	8 13	-89 93	90 29	12 00	12 00	0 00
7,140 00	39 41	275 16	7,114 70	9 77	-108 16	108 60	12 00	12 00	0 00
7,170 00	43 01	275 16	7,137 26	11 55	-127 84	128 36	12 00	12 00	0 00
7,171 01	43 13	275 16	7,138 00	11 61	-128 52	129 05	12 00	12 00	0 00
Brushy Canyon "U" Sand									
7,200 00	46 61	275 16	7,158 54	13 45	-148 89	149 50	12 00	12.00	0 00
7,230 00	50 21	275 16	7,178 45	15 47	-171 24	171 93	12 00	12 00	0 00
7,260 00	53 81	275 16	7,196 92	17 60	-194 78	195 57	12 00	12 00	0 00
7,290 00	57 41	275 16	7,213 86	19 83	-219 43	220 33	12 00	12 00	0 00
7,320 00	61 01	275 16	7,229 21	22 15	-245 09	246 09	12 00	12 00	0 00
7,350 00	64 61	275 16	7,242 92	24 55	-271 67	272 77	12 00	12 00	0 00
7,380 00	68 21	275 16	7,254 93	27 02	-299 04	300 26	12 00	12 00	0 00
7,410 00	71 81	275 16	7,265 18	29 56	-327 12	328 45	12 00	12 00	0 00
7,440 00	75 41	275 16	7,273 65	32 15	-355 77	357 22	12 00	12 00	0 00
7,470 00	79 00	275 16	7,280 29	34 78	-384 91	386 47	12 00	12 00	0 00
7,500 00	82 60	275 16	7,285 08	37 44	-414 40	416 08	12 00	12 00	0 00
7,530 00	86 20	275 16	7,288 01	40 13	-444 13	445 94	12 00	12 00	0 00
7,560 00	89 80	275 16	7,289 05	42 83	-473 98	475 91	12 00	12 00	0 00
7,569 28	90 92	275 16	7,289 00	43 66	-483 22	485 19	11 99	11 99	0 00
EOC Hold 90.92° INC :· 275.16° AZI									
7,590 00	90 92	275 16	7,288 66	45 53	-503 86	505 91	0 00	0 00	0 00
7,620 00	90 92	275 16	7,288 19	48 22	-533 73	535 91	0 00	0 00	0 00
7,650 00	90 92	275 16	7,287 71	50 92	-563 61	565 90	0 00	0 00	0 00
7,680 00	90 92	275 16	7,287 23	53 62	-593 48	595 90	0 00	0 00	0 00
7,710 00	90 92	275 16	7,286 75	56 32	-623 35	625 89	0 00	0 00	0 00
7,740 00	90 92	275 16	7,286 27	59 02	-653 23	655 89	0 00	0 00	0 00
7,770 00	90 92	275 16	7,285 79	61 72	-683 10	685 89	0 00	0 00	0 00
7,800 00	90 92	275 16	7,285 31	64 42	-712 98	715 88	0 00	0 00	0 00
7,830 00	90 92	275 16	7,284 83	67 12	-742 85	745 88	0 00	0 00	0 00
7,860 00	90 92	275 16	7,284 35	69 82	-772 73	775 87	0 00	0 00	0 00
7,890 00	90 92	275 16	7,283 87	72 52	-802 60	805 87	0 00	0 00	0 00
7,920 00	90 92	275 16	7,283 39	75 22	-832 48	835 87	0 00	0 00	0 00
7,950 00	90 92	275 16	7,282 91	77 92	-862 35	865 86	0 00	0 00	0 00
7,980 00	90 92	275 16	7,282 43	80 62	-892 22	895 86	0 00	0 00	0 00
8,010 00	90 92	275 16	7,281 95	83 32	-922 10	925 86	0 00	0 00	0 00
8,040 00	90 92	275 16	7,281 47	86 01	-951 97	955 85	0 00	0 00	0 00
8,070 00	90 92	275 16	7,280 99	88 71	-981 85	985 85	0 00	0 00	0 00
8,100 00	90 92	275 16	7,280 51	91 41	-1,011 72	1,015 84	0 00	0 00	0 00
8,130 00	90 92	275 16	7,280 03	94 11	-1,041 60	1,045 84	0 00	0 00	0 00
8,160 00	90 92	275 16	7,279 56	96 81	-1,071 47	1,075 84	0 00	0 00	0 00
8,190 00	90 92	275 16	7,279 08	99 51	-1,101 35	1,105 83	0 00	0 00	0 00
8,220 00	90 92	275 16	7,278 60	102 21	-1,131 22	1,135 83	0 00	0 00	0 00

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Well:	James Ranch Unit #106H	**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)
8,250 00	90.92	275 16	7,278 12	104 91	-1,161 10	1,165 83	0 00	0 00	0 00
8,280 00	90 92	275 16	7,277 64	107 61	-1,190 97	1,195 82	0 00	0 00	0 00
8,310 00	90 92	275 16	7,277 16	110 31	-1,220 84	1,225 82	0 00	0 00	0 00
8,340 00	90 92	275 16	7,276 68	113 01	-1,250 72	1,255 81	0 00	0 00	0 00
8,370 00	90 92	275 16	7,276 20	115 71	-1,280 59	1,285 81	0 00	0 00	0 00
8,400 00	90 92	275 16	7,275 72	118 41	-1,310 47	1,315 81	0 00	0 00	0 00
8,430 00	90 92	275 16	7,275 24	121 10	-1,340 34	1,345 80	0 00	0 00	0 00
8,460 00	90 92	275 16	7,274 76	123 80	-1,370 22	1,375 80	0 00	0 00	0 00
8,490 00	90 92	275 16	7,274 28	126 50	-1,400 09	1,405 79	0 00	0 00	0 00
8,520 00	90 92	275 16	7,273 80	129 20	-1,429 97	1,435 79	0 00	0 00	0 00
8,550 00	90 92	275 16	7,273 32	131 90	-1,459 84	1,465 79	0 00	0 00	0 00
8,580 00	90 92	275 16	7,272 84	134 60	-1,489 71	1,495 78	0 00	0 00	0 00
8,610 00	90 92	275 16	7,272 36	137 30	-1,519 59	1,525 78	0 00	0 00	0 00
8,640 00	90 92	275 16	7,271 88	140 00	-1,549 46	1,555 78	0 00	0 00	0 00
8,670 00	90 92	275 16	7,271 41	142 70	-1,579 34	1,585 77	0 00	0 00	0 00
8,700 00	90 92	275 16	7,270 93	145 40	-1,609 21	1,615 77	0 00	0 00	0 00
8,730 00	90 92	275 16	7,270 45	148 10	-1,639 09	1,645 76	0 00	0 00	0 00
8,760 00	90 92	275 16	7,269 97	150 80	-1,668 96	1,675 76	0 00	0 00	0 00
8,790 00	90 92	275 16	7,269 49	153 50	-1,698 84	1,705 76	0 00	0 00	0 00
8,820 00	90 92	275 16	7,269 01	156 20	-1,728 71	1,735 75	0 00	0 00	0 00
8,850 00	90 92	275 16	7,268 53	158 89	-1,758 58	1,765 75	0 00	0 00	0 00
8,880 00	90 92	275 16	7,268 05	161 59	-1,788 46	1,795 74	0 00	0 00	0 00
8,910 00	90 92	275 16	7,267 57	164 29	-1,818 33	1,825 74	0 00	0 00	0 00
8,940 00	90 92	275 16	7,267 09	166 99	-1,848 21	1,855 74	0 00	0 00	0 00
8,970 00	90 92	275 16	7,266 61	169 69	-1,878 08	1,885 73	0 00	0 00	0 00
9,000 00	90 92	275 16	7,266 13	172 39	-1,907 96	1,915 73	0 00	0 00	0 00
9,030 00	90 92	275 16	7,265 65	175 09	-1,937 83	1,945 73	0 00	0 00	0 00
9,060 00	90 92	275 16	7,265 17	177 79	-1,967 71	1,975 72	0 00	0 00	0 00
9,090 00	90 92	275 16	7,264 69	180 49	-1,997 58	2,005 72	0 00	0 00	0 00
9,120 00	90 92	275 16	7,264 21	183 19	-2,027 45	2,035 71	0 00	0 00	0 00
9,150 00	90 92	275 16	7,263 73	185 89	-2,057 33	2,065 71	0 00	0 00	0 00
9,180 00	90 92	275 16	7,263 26	188 59	-2,087 20	2,095 71	0 00	0 00	0 00
9,210 00	90 92	275 16	7,262 78	191 29	-2,117 08	2,125 70	0 00	0 00	0 00
9,240 00	90 92	275 16	7,262 30	193 99	-2,146 95	2,155 70	0 00	0 00	0 00
9,270 00	90 92	275 16	7,261 82	196 68	-2,176 83	2,185 69	0 00	0 00	0 00
9,300 00	90 92	275 16	7,261 34	199 38	-2,206 70	2,215 69	0 00	0 00	0 00
9,330 00	90 92	275 16	7,260 86	202 08	-2,236 58	2,245 69	0 00	0 00	0 00
9,360 00	90 92	275 16	7,260 38	204 78	-2,266 45	2,275 68	0 00	0 00	0 00
9,390 00	90 92	275 16	7,259 90	207 48	-2,296 33	2,305 68	0 00	0 00	0 00
9,420 00	90 92	275.16	7,259 42	210 18	-2,326 20	2,335 68	0 00	0 00	0 00
9,450 00	90 92	275 16	7,258 94	212 88	-2,356 07	2,365 67	0 00	0 00	0 00
9,480 00	90 92	275 16	7,258 46	215 58	-2,385 95	2,395 67	0 00	0 00	0 00
9,510 00	90 92	275 16	7,257 98	218 28	-2,415 82	2,425 66	0 00	0 00	0 00
9,540 00	90 92	275 16	7,257 50	220 98	-2,445 70	2,455 66	0 00	0 00	0 00
9,570 00	90 92	275 16	7,257 02	223 68	-2,475 57	2,485 66	0 00	0 00	0 00
9,600 00	90 92	275 16	7,256 54	226 38	-2,505 45	2,515 65	0 00	0 00	0 00
9,630 00	90 92	275 16	7,256 06	229 08	-2,535 32	2,545 65	0 00	0 00	0 00
9,660 00	90 92	275 16	7,255 58	231 78	-2,565 20	2,575 64	0 00	0 00	0 00
9,690 00	90 92	275 16	7,255 10	234 47	-2,595 07	2,605 64	0 00	0 00	0 00
9,720 00	90 92	275 16	7,254 63	237 17	-2,624 94	2,635 64	0 00	0 00	0 00
9,750 00	90 92	275 16	7,254 15	239 87	-2,654 82	2,665 63	0 00	0 00	0 00
9,780 00	90 92	275 16	7,253 67	242 57	-2,684 69	2,695 63	0 00	0 00	0 00
9,810 00	90 92	275 16	7,253 19	245 27	-2,714 57	2,725 63	0 00	0 00	0 00
9,840 00	90 92	275 16	7,252 71	247 97	-2,744 44	2,755 62	0 00	0 00	0 00

Database:	EDM 2003 14 Server Db	**Local Co-ordinate Reference:**	Site James Ranch Unit #106H
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Site:	James Ranch Unit #106H	**North Reference:**	Grid
Well:	James Ranch Unit #106H	**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)
9,870 00	90 92	275 16	7,252 23	250 67	-2,774 32	2,785 62	0 00	0 00	0 00
9,900 00	90 92	275 16	7,251 75	253 37	-2,804 19	2,815 61	0 00	0 00	0 00
9,930 00	90 92	275 16	7,251 27	256 07	-2,834 07	2,845 61	0 00	0 00	0 00
9,960 00	90 92	275 16	7,250 79	258 77	-2,863 94	2,875 61	0 00	0 00	0 00
9,990 00	90 92	275 16	7,250 31	261 47	-2,893 81	2,905 60	0 00	0 00	0 00
10,020 00	90 92	275 16	7,249 83	264 17	-2,923 69	2,935 60	0 00	0 00	0 00
10,050 00	90 92	275 16	7,249 35	266 87	-2,953 56	2,965 60	0 00	0 00	0 00
10,080 00	90 92	275 16	7,248 87	269 56	-2,983 44	2,995 59	0 00	0 00	0 00
10,110 00	90 92	275 16	7,248 39	272 26	-3,013 31	3,025 59	0 00	0 00	0 00
10,140 00	90 92	275 16	7,247 91	274 96	-3,043 19	3,055 58	0 00	0 00	0 00
10,170 00	90 92	275 16	7,247 43	277 66	-3,073 06	3,085 58	0 00	0 00	0 00
10,200 00	90 92	275 16	7,246 95	280 36	-3,102 94	3,115 58	0 00	0 00	0 00
10,230 00	90 92	275 16	7,246 48	283 06	-3,132 81	3,145 57	0 00	0 00	0 00
10,260 00	90 92	275 16	7,246 00	285 76	-3,162 68	3,175 57	0 00	0 00	0 00
10,290 00	90 92	275 16	7,245 52	288 46	-3,192 56	3,205 56	0 00	0 00	0 00
10,320 00	90 92	275 16	7,245 04	291 16	-3,222 43	3,235 56	0 00	0 00	0 00
10,350 00	90 92	275 16	7,244 56	293 86	-3,252 31	3,265 56	0 00	0 00	0 00
10,380 00	90 92	275 16	7,244 08	296 56	-3,282 18	3,295 55	0 00	0 00	0 00
10,410 00	90 92	275 16	7,243 60	299 26	-3,312 06	3,325 55	0 00	0 00	0 00
10,440 00	90 92	275 16	7,243 12	301 96	-3,341 93	3,355 55	0 00	0 00	0 00
10,470 00	90 92	275.16	7,242 64	304 66	-3,371 81	3,385 54	0 00	0 00	0 00
10,500 00	90 92	275 16	7,242 16	307 35	-3,401 68	3,415 54	0 00	0 00	0 00
10,530 00	90 92	275 16	7,241 68	310 05	-3,431 56	3,445 53	0 00	0 00	0 00
10,560 00	90 92	275 16	7,241 20	312 75	-3,461 43	3,475 53	0 00	0 00	0 00
10,590 00	90 92	275 16	7,240 72	315 45	-3,491 30	3,505 53	0 00	0 00	0 00
10,620 00	90 92	275.16	7,240 24	318 15	-3,521 18	3,535 52	0 00	0 00	0 00
10,650 00	90 92	275 16	7,239 76	320 85	-3,551 05	3,565 52	0 00	0 00	0 00
10,680 00	90 92	275 16	7,239 28	323 55	-3,580 93	3,595 51	0 00	0 00	0 00
10,710 00	90 92	275 16	7,238 80	326 25	-3,610 80	3,625 51	0 00	0 00	0 00
10,740 00	90 92	275 16	7,238 33	328 95	-3,640 68	3,655 51	0 00	0 00	0 00
10,770 00	90 92	275 16	7,237 85	331 65	-3,670 55	3,685 50	0 00	0 00	0 00
10,800 00	90 92	275 16	7,237 37	334 35	-3,700 43	3,715 50	0 00	0 00	0 00
10,830 00	90 92	275 16	7,236 89	337 05	-3,730 30	3,745 50	0 00	0 00	0 00
10,860 00	90 92	275 16	7,236 41	339 75	-3,760 17	3,775 49	0 00	0 00	0 00
10,890 00	90 92	275 16	7,235 93	342 45	-3,790 05	3,805 49	0 00	0 00	0 00
10 920 00	90 92	275 16	7,235 45	345 14	-3,819 92	3,835 48	0 00	0 00	0 00
10,950 00	90 92	275 16	7,234 97	347 84	-3,849 80	3,865 48	0 00	0 00	0 00
10,980 00	90 92	275 16	7,234 49	350 54	-3,879 67	3,895 48	0 00	0 00	0 00
11,010 00	90 92	275 16	7,234 01	353 24	-3,909 55	3,925 47	0 00	0 00	0 00
11,040 00	90 92	275 16	7,233 53	355 94	-3,939 42	3,955 47	0 00	0 00	0 00
11,070 00	90 92	275 16	7,233 05	358 64	-3,969 30	3,985 46	0 00	0 00	0 00
11,100 00	90 92	275 16	7,232 57	361 34	-3,999 17	4,015 46	0 00	0 00	0 00
11,130 00	90 92	275 16	7,232 09	364 04	-4,029 04	4,045 46	0 00	0 00	0 00
11,160 00	90 92	275 16	7,231 61	366 74	-4,058 92	4,075 45	0 00	0 00	0 00
11,190 00	90 92	275 16	7,231 13	369 44	-4,088 79	4,105 45	0 00	0 00	0 00
11,220 00	90 92	275 16	7,230 65	372 14	-4,118 67	4,135 45	0 00	0 00	0 00
11,250 00	90 92	275 16	7,230 18	374 84	-4,148 54	4,165 44	0 00	0 00	0 00
11,280 00	90 92	275 16	7,229 70	377 54	-4,178 42	4,195 44	0 00	0 00	0 00
11,310 00	90 92	275 16	7,229 22	380 24	-4,208 29	4,225 43	0 00	0 00	0 00
11,340 00	90 92	275 16	7,228 74	382 93	-4,238 17	4,255 43	0 00	0 00	0 00
11,370 00	90 92	275 16	7,228 26	385 63	-4,268 04	4,285 43	0 00	0 00	0 00
11,400 00	90 92	275 16	7,227 78	388 33	-4,297 91	4,315 42	0 00	0 00	0 00
11,430 00	90 92	275 16	7,227 30	391 03	-4,327 79	4,345 42	0 00	0 00	0 00

Database:	EDM 2003 14 Server Db	**Local Co-ordinate Reference:**	Site James Ranch Unit #106H
Company:	BEPCO, 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 #106H	**North Reference:**	Grid
Well:	James Ranch Unit #106H	**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)
11,460 00	90 92	275 16	7,226 82	393 73	-4,357 66	4,375 42	0 00	0 00	0 00
11,490 00	90 92	275 16	7,226.34	396 43	-4,387 54	4,405.41	0 00	0 00	0 00
11,520 00	90 92	275 16	7,225 86	399 13	-4,417 41	4,435 41	0 00	0 00	0 00
11,550 00	90 92	275 16	7,225 38	401 83	-4,447 29	4,465 40	0 00	0 00	0 00
11,580 00	90 92	275 16	7,224 90	404 53	-4,477 16	4,495 40	0 00	0 00	0 00
11,610 00	90 92	275 16	7,224 42	407 23	-4,507 04	4,525 40	0 00	0 00	0 00
11,640 00	90.92	275 16	7,223 94	409 93	-4,536 91	4,555 39	0 00	0.00	0 00
11,670 00	90 92	275 16	7,223 46	412 63	-4,566 79	4,585 39	0 00	0 00	0 00
11,700 00	90 92	275 16	7,222 98	415 33	-4,596 66	4,615 38	0 00	0 00	0 00
11,730 00	90 92	275 16	7,222 50	418 02	-4,626 53	4,645 38	0 00	0 00	0 00
11,760 00	90 92	275 16	7,222 02	420 72	-4,656 41	4,675 38	0 00	0 00	0 00
11,790 00	90 92	275 16	7,221 55	423 42	-4,686 28	4,705 37	0 00	0 00	0 00
11,820 00	90 92	275 16	7,221 07	426 12	-4,716 16	4,735 37	0 00	0 00	0 00
11,850 00	90 92	275 16	7,220 59	428 82	-4,746 03	4,765 37	0 00	0 00	0 00
11,880 00	90 92	275 16	7,220 11	431 52	-4,775 91	4,795 36	0 00	0 00	0 00
11,910 00	90 92	275 16	7,219 63	434 22	-4,805 78	4,825 36	0 00	0 00	0 00
11,940 00	90 92	275 16	7,219 15	436 92	-4,835 66	4,855 35	0 00	0 00	0 00
11,970 00	90 92	275 16	7,218 67	439 62	-4,865 53	4,885 35	0 00	0 00	0 00
12,000 00	90 92	275 16	7,218 19	442 32	-4,895 40	4,915 35	0 00	0 00	0 00
12,030 00	90 92	275 16	7,217 71	445 02	-4,925 28	4,945 34	0 00	0 00	0 00
12,060 00	90 92	275 16	7,217 23	447 72	-4,955 15	4,975 34	0 00	0 00	0 00
12,090 00	90 92	275 16	7,216 75	450 42	-4,985 03	5,005 33	0 00	0 00	0 00
12,120 00	90 92	275 16	7,216 27	453 12	-5,014 90	5,035 33	0 00	0 00	0 00
12,150 00	90 92	275 16	7,215 79	455 81	-5,044 78	5,065 33	0 00	0 00	0 00
12,180 00	90 92	275 16	7,215 31	458 51	-5,074 65	5,095 32	0 00	0 00	0 00
12,210 00	90 92	275 16	7,214 83	461 21	-5,104 53	5,125 32	0 00	0 00	0 00
12,240 00	90 92	275 16	7,214 35	463 91	-5,134 40	5,155 32	0 00	0 00	0 00
12,270 00	90 92	275 16	7,213 87	466 61	-5,164 27	5,185 31	0 00	0 00	0 00
12,300 00	90 92	275 16	7,213 40	469 31	-5,194 15	5,215 31	0 00	0 00	0 00
12,330 00	90 92	275 16	7,212 92	472 01	-5,224 02	5,245 30	0 00	0 00	0 00
12,360 00	90 92	275 16	7,212 44	474 71	-5,253 90	5,275 30	0 00	0 00	0 00
12,390 00	90 92	275 16	7,211 96	477 41	-5,283 77	5,305 30	0 00	0 00	0 00
12,420 00	90 92	275 16	7,211 48	480 11	-5,313 65	5,335 29	0 00	0 00	0 00
12,450 00	90 92	275 16	7,211 00	482 81	-5,343 52	5,365 29	0 00	0 00	0 00
12,480 00	90 92	275 16	7,210 52	485 51	-5,373 40	5,395 28	0 00	0 00	0 00
12,510 00	90 92	275 16	7,210 04	488 21	-5,403 27	5,425 28	0 00	0 00	0 00
12,540 00	90 92	275 16	7,209 56	490 91	-5,433 14	5,455 28	0 00	0 00	0 00
12,570 00	90 92	275 16	7,209 08	493 60	-5,463 02	5,485 27	0 00	0 00	0 00
12,575 04	90 92	275 16	7,209 00	494 06	-5,468 04	5,490 31	0 00	0 00	0 00

Database:	EDM 2003 14 Server Db	**Local Co-ordinate Reference:**	Site James Ranch Unit #106H
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Site:	James Ranch Unit #106H	**North Reference:**	Grid
Well:	James Ranch Unit #106H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Lateral #1		
Design:	Plan #1		

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
LL[JRU#106H] - plan misses by 6826 03ft at 6811 50ft MD (6811 50 TVD, 0 00 N, 0 00 E) - Rectangle (sides W1,320 00 H6,680 70 D0 00)	0 00	0 00	5 00	504 69	-107 32	490,358 76	693,768 97	32° 20' 49 556 N	103° 50' 23 059 W
HL[JRU#106H] - plan misses by 6826 03ft at 6811 50ft MD (6811 50 TVD, 0 00 N, 0 00 E) - Rectangle (sides W660 00 H6,020 70 D0 00)	0 00	0 00	5 00	504 69	-107 32	490,358.76	693,768 97	32° 20' 49 556 N	103° 50' 23 059 W
PBHL#1[JRU#106H] - plan hits target - Point	0 00	0 00	7,209 00	494 06	-5,468 04	490,348 13	688,408 25	32° 20' 49 691 N	103° 51' 25 549 W

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
7,171 01	7,138 00	Brushy Canyon "U" Sand		0 00	

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment	
6,811 50	6,811 50	0 00	0 00	KOP Build 12 00°/100'	TFO 275 16
7,569 28	7,289 00	43 66	-483 22	EOC Hold 90 92° INC	275 16° AZI

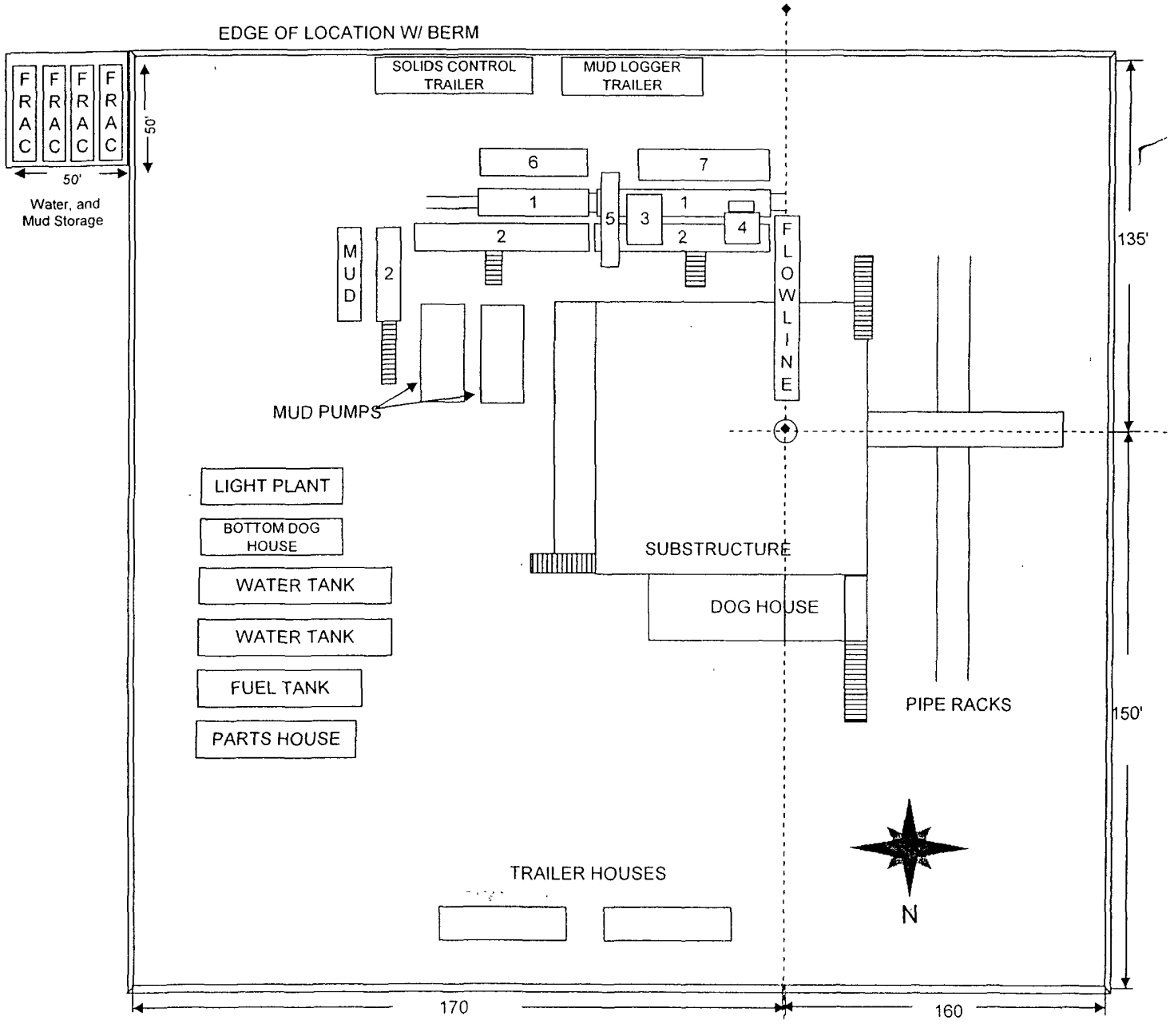
BOPCO, L.P.
James Ranch Unit #106H
Section 36, T-22-S, R-30-E
Eddy County, NM

Exhibit "D"

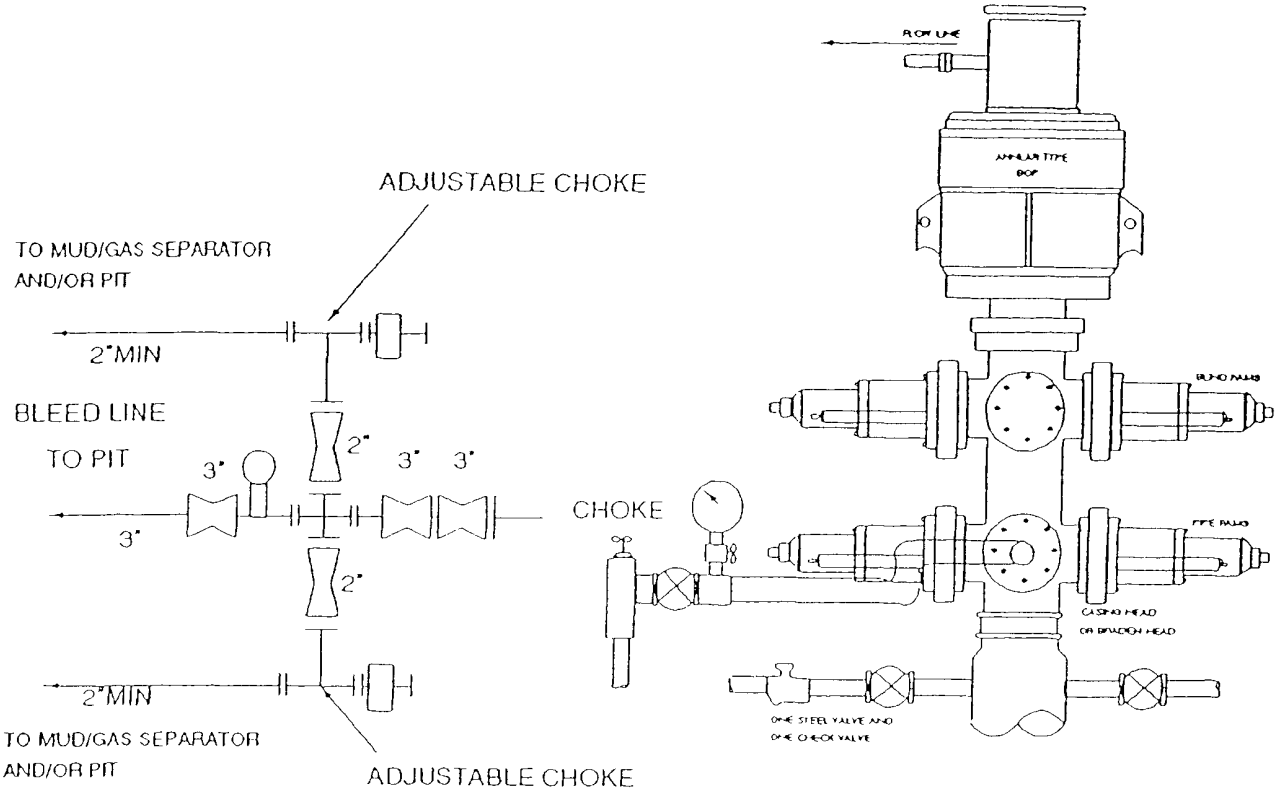
RIG LAYOUT SCHEMATIC
INCLUSIVE OF CLOSED-LOOP DESIGN PLAN

Solids Control Equipment Legend

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



3000 PSI WP



THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS

A. One double gate blowout preventer with lower rams for pipe and upper rams blind, 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 BOP's.

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. All chokes will be adjustable Choke spool may be used between rams

DIAGRAM 2

MULTI-POINT SURFACE USE PLAN

NAME OF WELL: James Ranch Unit #106H
LEGAL DESCRIPTION - SURFACE: 1595' FSL, 1096' FWL, Section 36, T22S, R30E, Eddy County, NM.
BHL: 2100' 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 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

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

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

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

(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

1/9/09
Date

Gary E. Gerhard

GEG/mac

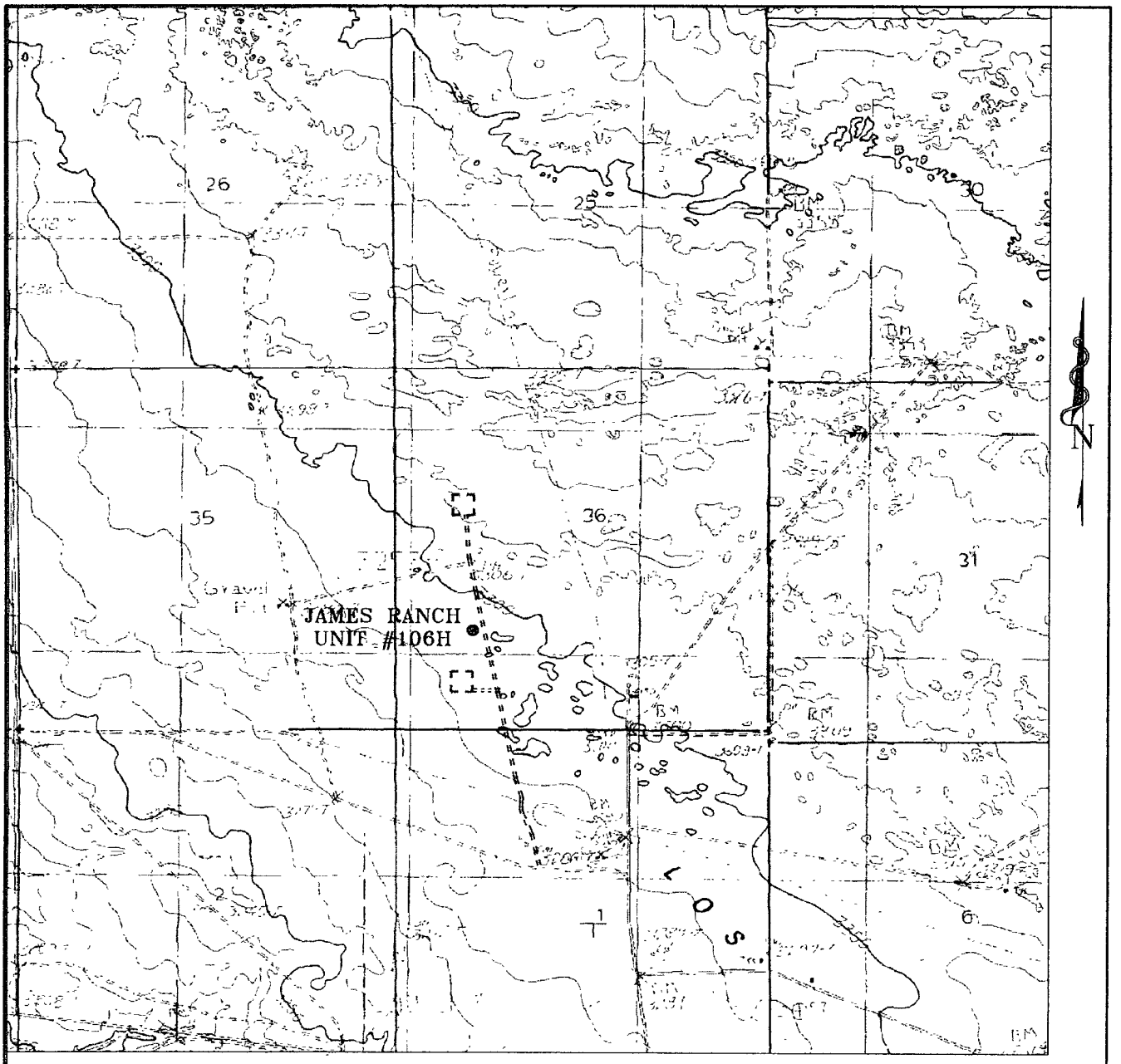
OPERATOR CERTIFICATION

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.

1/9/09
Date

Gary E. Gerhard
Gary E. Gerhard

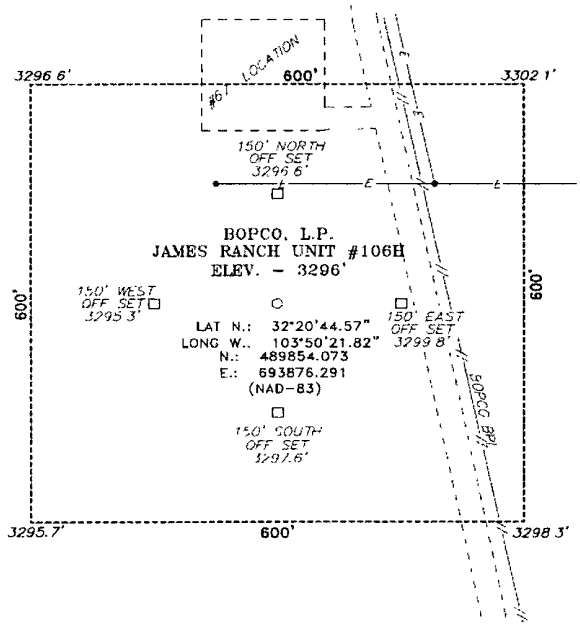
James Ranch Unit #106H
Exhibit "A"



JAMES RANCH UNIT #106H
1460' FSL and 1096' FWL
Section 36, Township 22 South, Range 30 East,
N.M.P.M., Eddy County, New Mexico.

James Ranch Unit #106H
Exhibit "B"

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



200 0 200 400 FEET

SCALE: 1" = 200'

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 PROPOSED LOCATION

BOPCO, L.P.

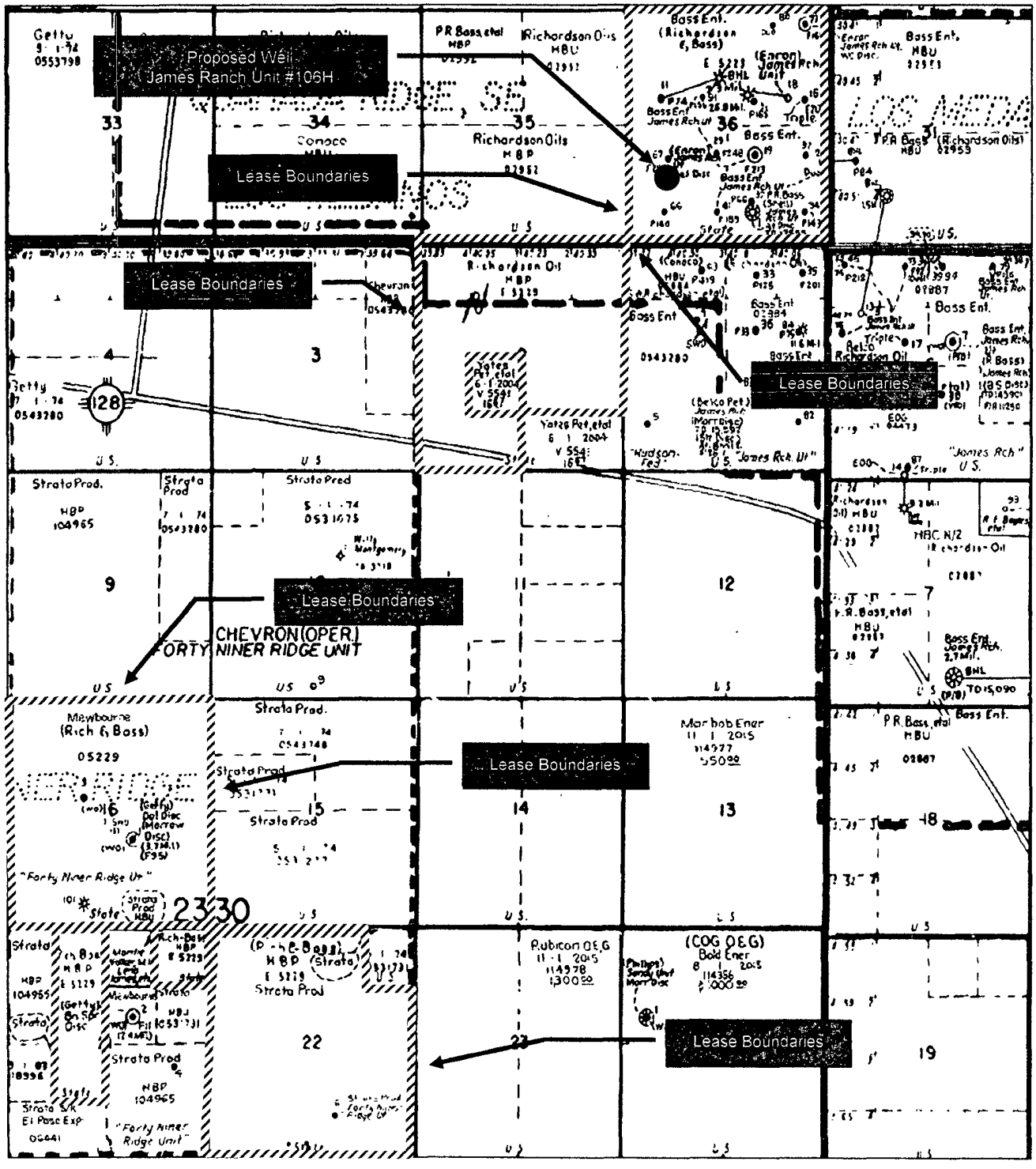
REF. JAMES RANCH UNIT #106H / WELL PAD AND TOPO

THE JAMES RANCH UNIT #106H LOCATED 1595' FROM THE SOUTH LINE AND 1096' FROM THE WEST LINE OF SECTION 36, TOWNSHIP 22 SOUTH, RANGE 30 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

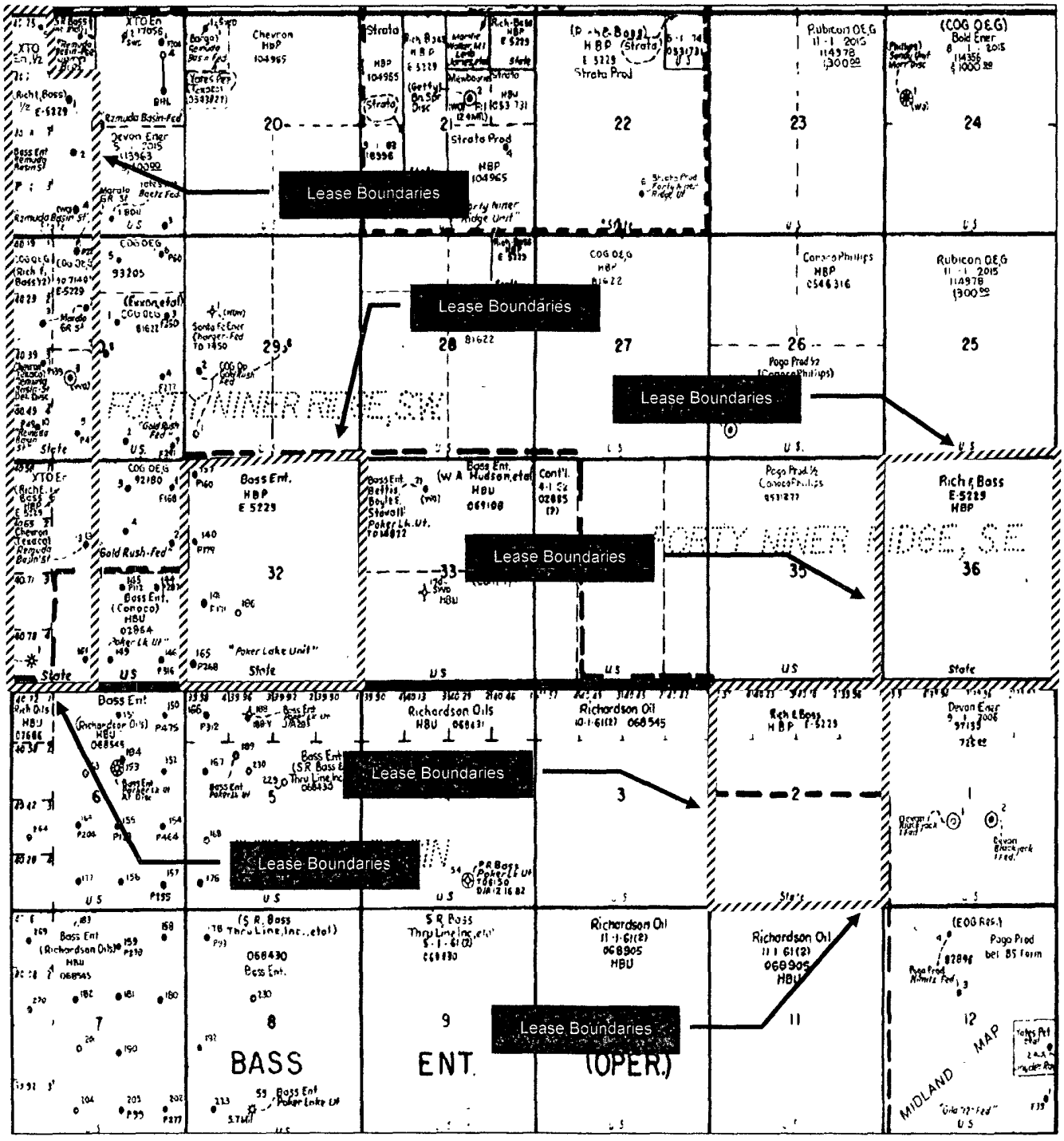
BASIN SURVEYS P.O. BOX 1786 – HOBBS, NEW MEXICO

W.O. Number 20994	Drawn By J. SMALL		
Date. 01-08-2009	Disk 20994 .MS	Survey Date 01-05-2009	Sheet 1 of 1 Sheets

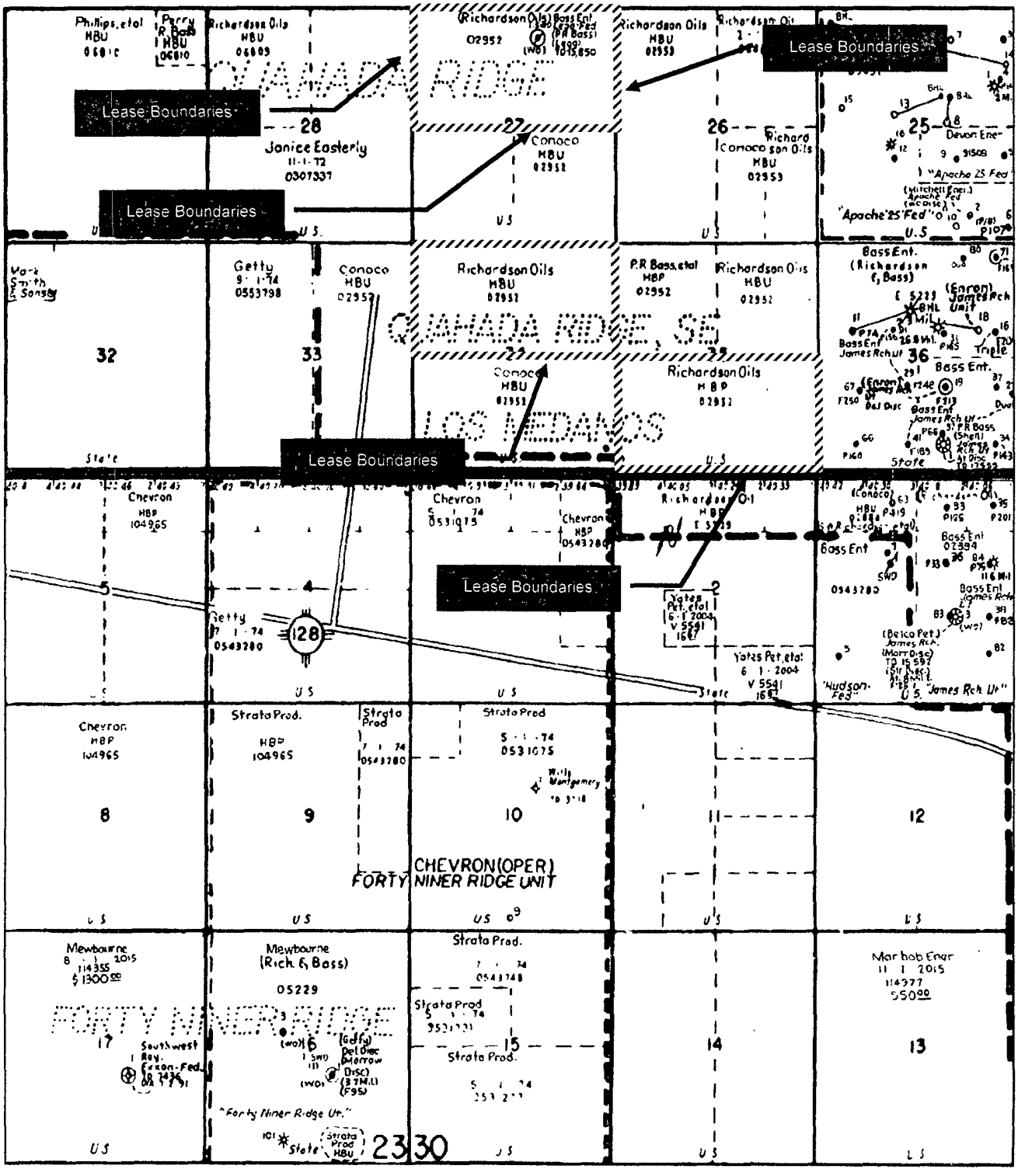
James Ranch Unit #106H Exhibit "C"



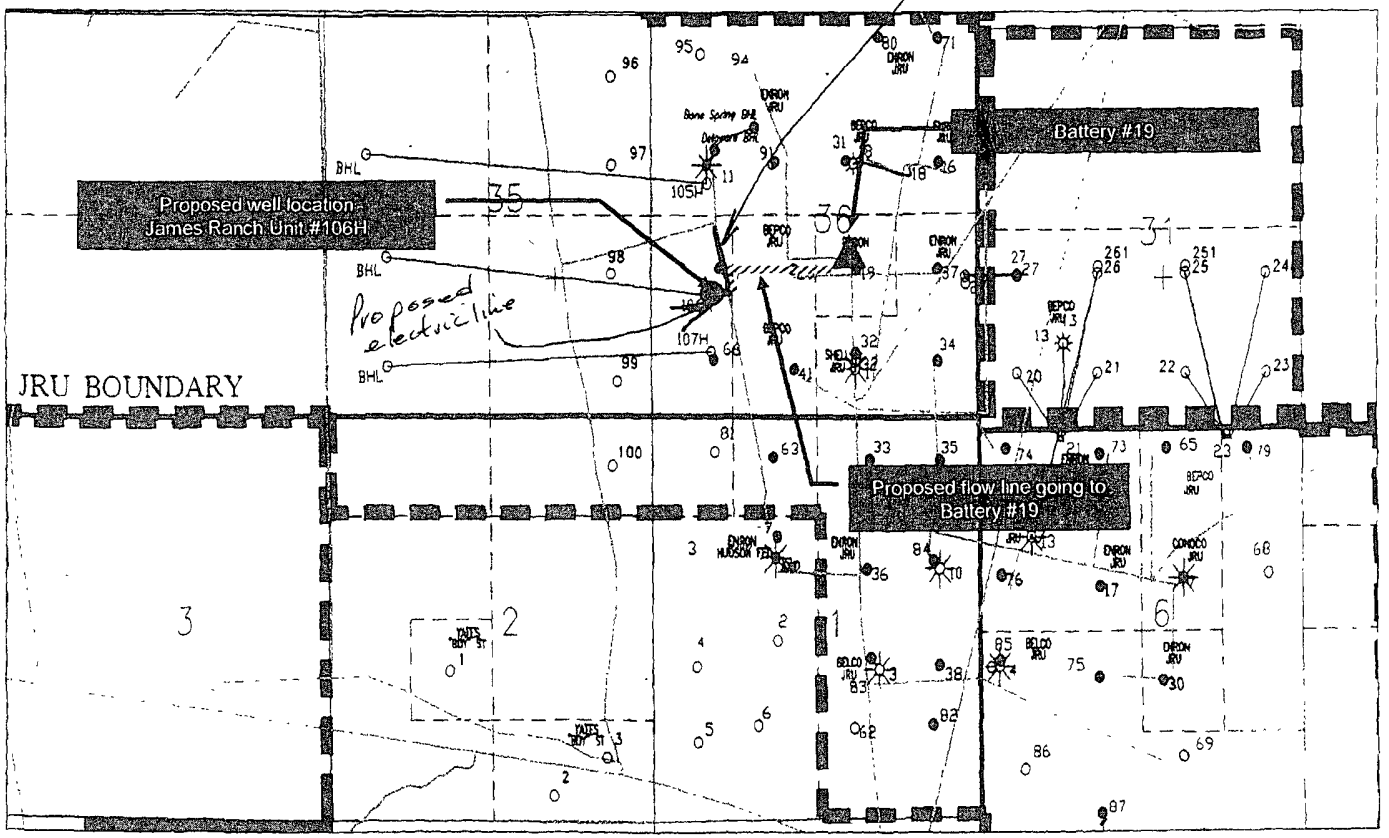
James Ranch Unit #106H Exhibit "C"



James Ranch Unit #106H Exhibit "C"



James Ranch Unit #106H
Exhibit "E"



PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	BOPCO, L.P.
LEASE NO.:	NM02952A
WELL NAME & NO.:	James Ranch Unit # 106H
SURFACE HOLE FOOTAGE:	1595' FSL & 1096' FWL
BOTTOM HOLE FOOTAGE	2100' FSL & 990' FWL
LOCATION:	Section 36, 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.

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)

LESSER PRAIRIE-CHICKENS

No surface use is allowed during the following time periods; unless otherwise specified, this stipulation does not apply to operation and maintenance of production facilities.

For the purpose of: Protecting Lesser Prairie-Chickens:

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

V-DOOR EAST NORTHEAST

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.

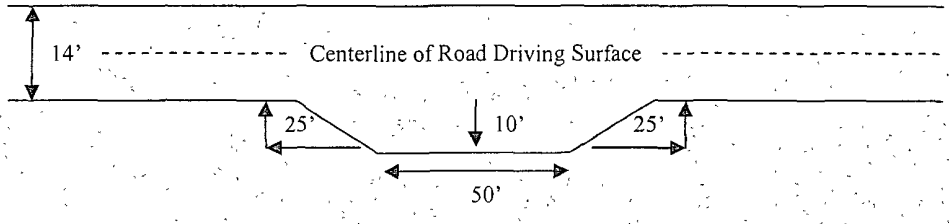
Crowning
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

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:

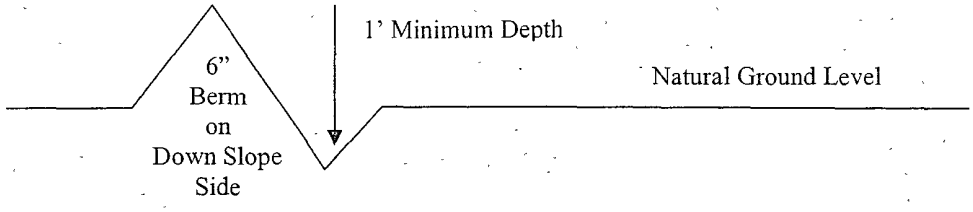
Standard Turnout – Plan View



Drainage
Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping 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.

Cross Section of a Typical 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 foot road with 4% road slope: $\frac{400'}{4\%} + 100' = 200'$ 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.

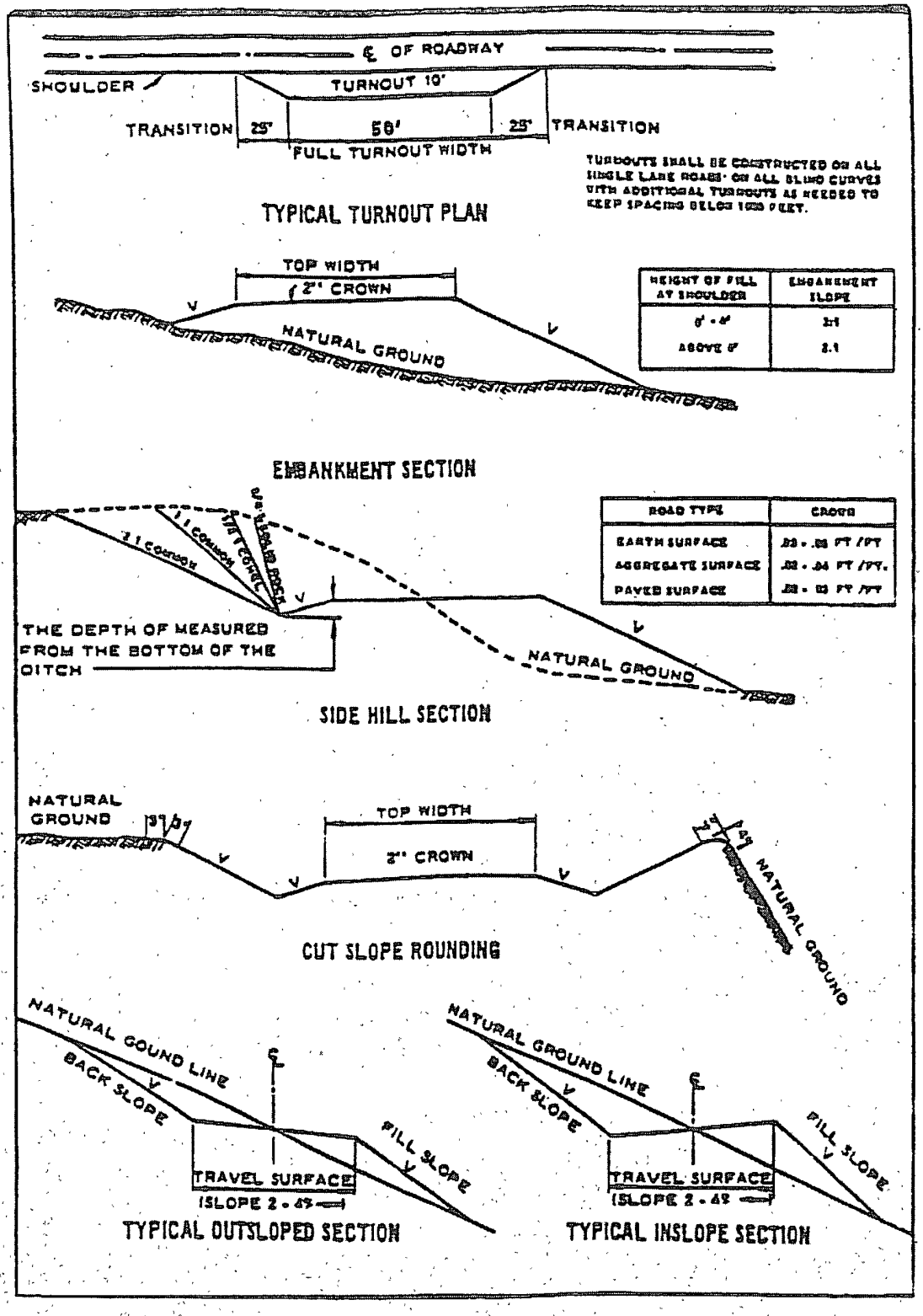
A gate shall be constructed and fastened securely to H-braces.

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 610 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.

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 of duney areas, the pipeline will be "snaked" around hummocks and dunes rather then 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 hehalf, 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

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:

Species	lb/acre
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.

OCD-ARTESIA

Form 3160-5
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OM B 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.**

5 Lease Serial No
E5229 NM 92452 A

6 If Indian, Allottee or Tribe Name

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

1 Type of Well
☑ Oil Well ☐ Gas Well ☐ Other

8 Well Name and No.
James Ranch Unit #106H

2 Name of Operator **BOPCO, 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 Area
Quahada Ridge SE (Delaware)

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

Surface: NWSW, UL L, 1595' FSL, 1096' FWL, Lat N32.34534, Lon W103.83939, Sec 36, T22S, R30
BHL: 2100 FSL,990 FWL,Sec 35-R22S-R30E,Lat N32.347139,Lon W103.857092, Sec 36, T22S, R30E

11 County or Parish, State
Eddy County, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☑ Other **Revised Rig Plat**
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ 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 recomplete 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 recompletion 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. requests approval of the attached rig plat.

The original APD contained the wrong rig "footprint", BOPCO is now using H&P Rig #317. The new rig plat is 90' X 45' larger.

BOPCO L.P. Bond # on file: COB00050

OL CLL 04/09/09

14 I hereby certify that the foregoing is true and correct
Name *(Printed/Typed)*
Annette Childers Title **Regulatory Clerk**

Signature Annette Childers Date 3-30-09

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by **/s/ Don Peterson** Title APM Date 4/20/09

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 CFO

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

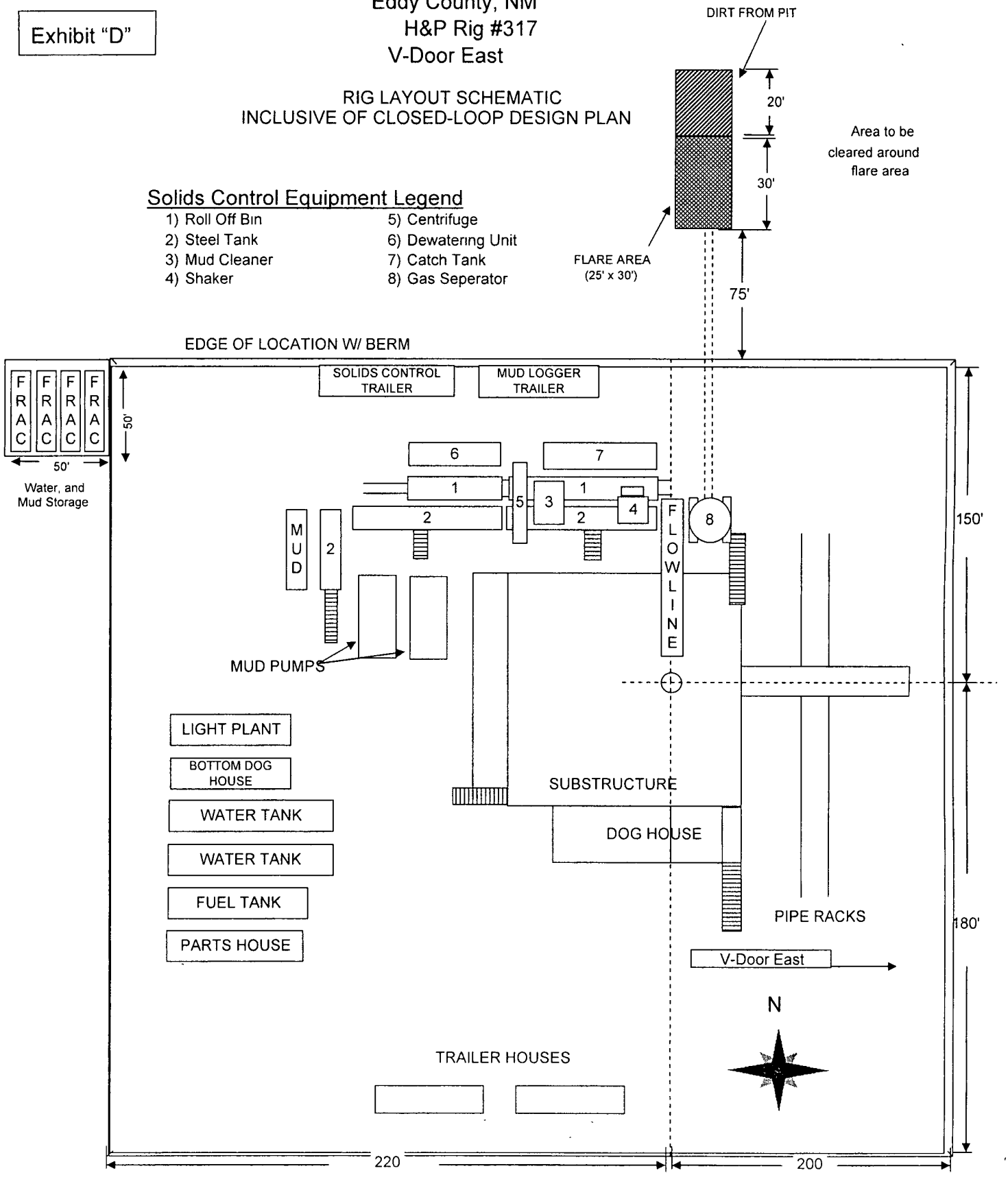
(Instructions on page 2)

Original c.l. 04/09/09

Exhibit "D"

BOPCO, L.P.
James Ranch Unit #106H
Sec 36, T22S-R30E
Eddy County, NM
H&P Rig #317
V-Door East

RIG LAYOUT SCHEMATIC
INCLUSIVE OF CLOSED-LOOP DESIGN PLAN



Wtd-ser/Drilling/DrillingDiagrams/H&P Drilling Rig Pad deminsions - Closed Loop JRU106HRes Pit Exibit D w-rig

Original C.L. 04/09/09

BOPCO, L.P.
James Ranch Unit #106H
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
2) Steel Tank
3) Mud Cleaner
4) Shaker
5) Centrifuge
6) Dewatering Unit
7) Catch Tank
8) Gas Seperator