AFS-10-730

OCD-ARTESIA

Split Estate

Form 3160-3
(April 2004)

R-111-POTASH

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

EA 1019

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER WIPP

1a. Type of work: ☑ DRILL ☐ REENTER	5. Lease Serial No. **NM02953 & E5229**
	6. If Indian, Allotee or Tribe Name
1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone	7. If Unit or CA Agreement, Name and No.
2. Name of Operator **BOPCO, L. P.** (260737)	8. Lease Name and Well No. **James Ranch Unit #129H** (306407)
3a. Address **P. O. Box 2760 Midland, TX 79702**	3b. Phone No. *(include area code)* **432-683-2277**
4. Location of Well *(Report location clearly and in accordance with any State requirements.*)* At surface **NENE, UL A, 630' FNL, 330' FEL, Lat N32.354089, Long W103.826681** At proposed prod. zone **430' FNL, 330' FEL, Sec 31, T22S, R31E, Lt N32.354083, Lg W103.809539**	9. API Well No. **30-015-38288** 10. Field and Pool, or Exploratory **Quahada Ridge SE (Delaware)** (50443) 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 drig. unit line, if any) **330'**	16. No. of acres in lease **8027.94** 17. Spacing Unit dedicated to this well **160**
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. **438'**	19. Proposed Depth **12,673 MD, 7,750' TVD** 20. BLM/BIA Bond No. on file **COB000050**
21. Elevations (Show whether DF, KDB, RT, GL, etc.) **3324' GL**	22. Approximate date work will start* **11/01/2010** 23. Estimated duration **30 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)* **Katy Holster**	Date 7/27/10
Title **Administrative Assistant**		
Approved by *(Signature)* /s/ Linda S. C. Rundell	Name *(Printed/Typed)* /s/ Linda S. C. Rundell	Date OCT 27 2010
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

SEE ATTACHED FOR CONDITIONS OF APPROVAL

RECEIVED
NOV 05 2010
NMOCD ARTESIA

KZ 11/22/10

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410
DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

Form C-102
Revised October 15, 2009

Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-015-38288	50443	Quahada Ridge SE (Delaware)

Property Code	Property Name	Well Number
306407	JAMES RANCH UNIT	129H

OGRID No.	Operator Name	Elevation
260737	BOPCO, L.P.	3324'

Surface Location

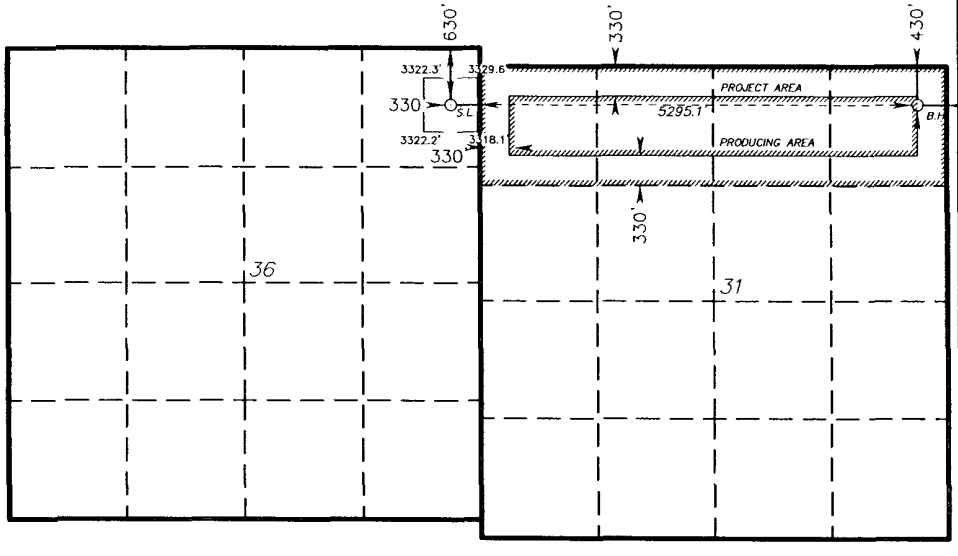
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	36	22 S	30 E		630	NORTH	330	EAST	EDDY

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
A	31	22 S	31 E		430	NORTH	330	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160	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



SURFACE LOCATION
Lat - N 32°21'14.72"
Long - W 103°49'36.05"
NMSPCE- N 492919.578
E 697787.915
(NAD-83)

DELAWARE PENETRATION PT.
Lat - N 32°21'14.72"
Long - W 103°49'36.05"
NMSPCE- N 492919.578
E 697787.915
(NAD-83)

LO BRUSHY CANYON "W" SAND PENETRATION PT.
Lat - N 32°21'14.72"
Long - W 103°49'32.70"
NMSPCE- N 492920.83
E 698075.28
(NAD-83)

PROPOSED BOTTOM HOLE LOCATION
Lat - N 32°21'14.70"
Long - W 103°48'34.34"
NMSPCE- N 492942.580
E 703081.811
(NAD-83)

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

Gary Gerhard 7/27/10
Signature Date

Gary 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.

JUNE 25, 2010
Date Surveyed

Signature & Seal of Professional Surveyor

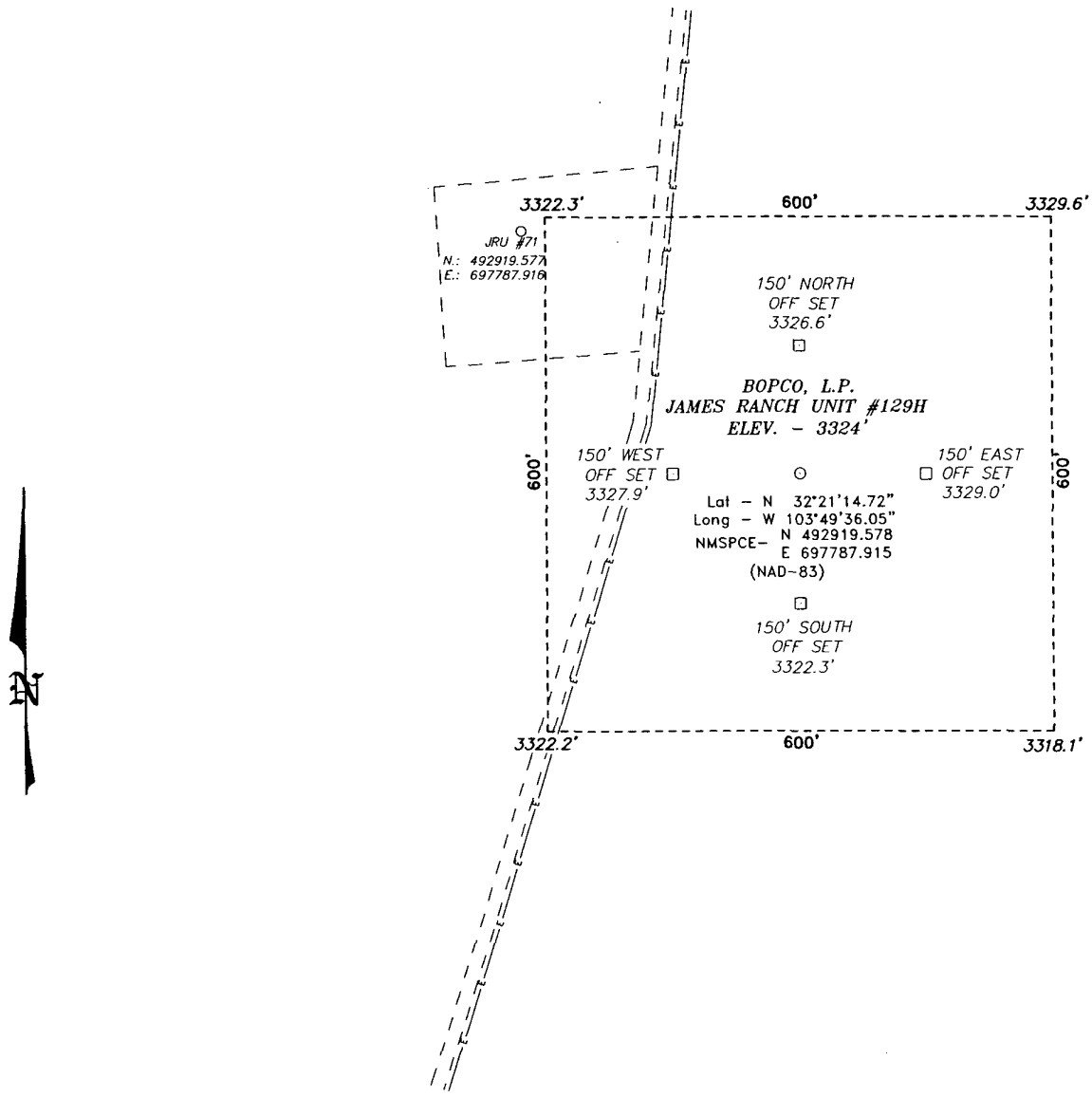
GARY L. JONES
NEW MEXICO
7977
REGISTERED PROFESSIONAL SURVEYOR

NM No. 22904

Certificate No. Gary L. Jones 7977

BASIN SURVEYS

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 HWY 128 AND WIPP ROAD, GO NORTH ON WIPP ROAD 0.8 MILES TO LEASE ROAD, ON LEASE ROAD GO WEST 0.4 MILES TO LEASE ROAD, ON LEASE ROAD GO NORTH 2.0 MILES TO PROPOSED LOCATION.

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

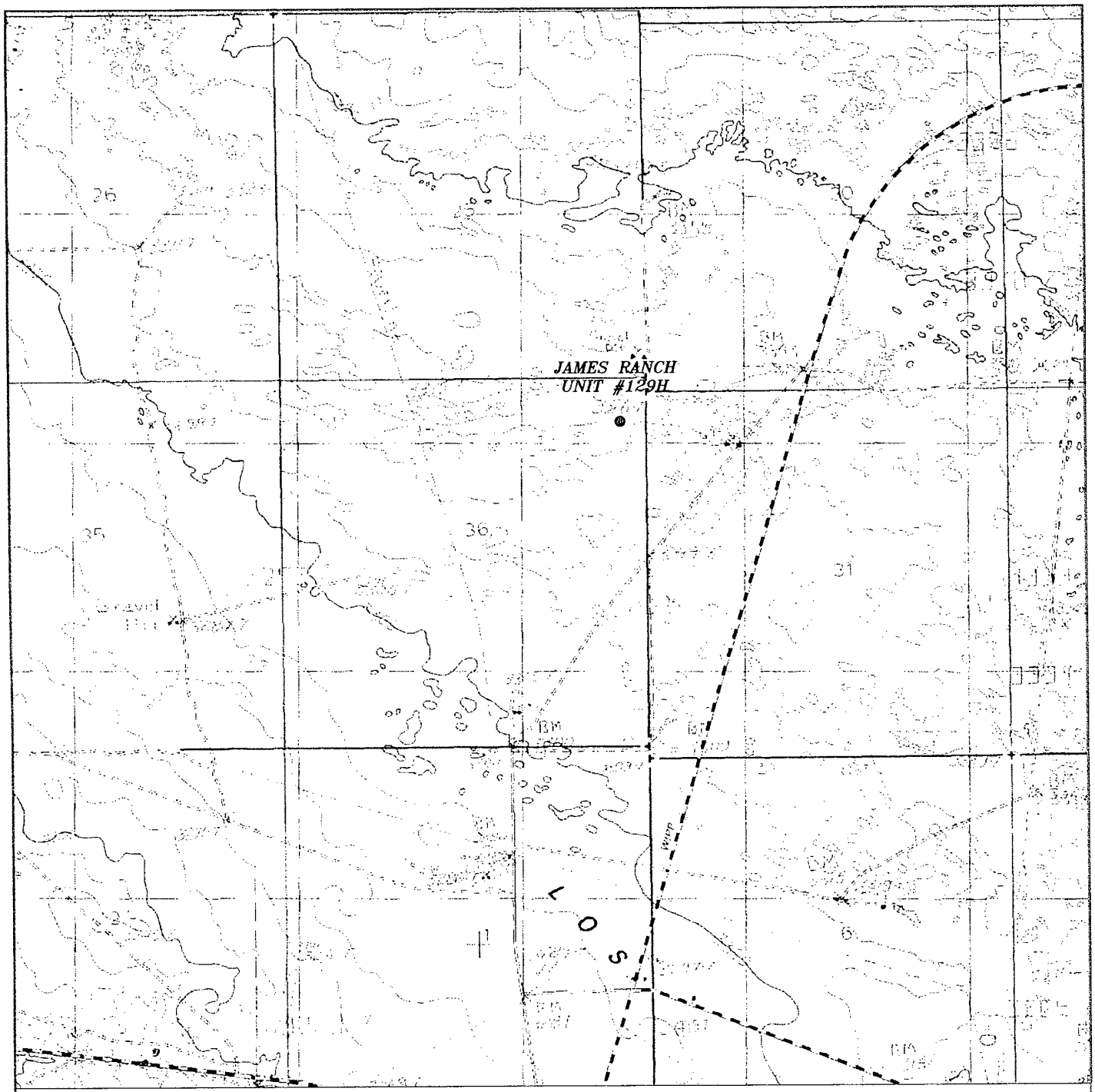
W.O. Number: 22992	Drawn By: J. SMALL
Date: 06-28-2010	Disk: JMS 22992

BOPCO, L.P.

REF: JAMES RANCH UNIT #129H / WELL PAD TOPO

THE JAMES RANCH UNIT #129H LOCATED 630' FROM THE NORTH LINE AND 330' FROM THE EAST LINE OF SECTION 36, TOWNSHIP 22 SOUTH, RANGE 30 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 06-25-2010	Sheet 1 of 1 Sheets



JAMES RANCH UNIT #129H

Located 630' FNL and 330' FEL
Section 36, Township 22 South, Range 30 East,
N.M.P.M., Eddy County, New Mexico.

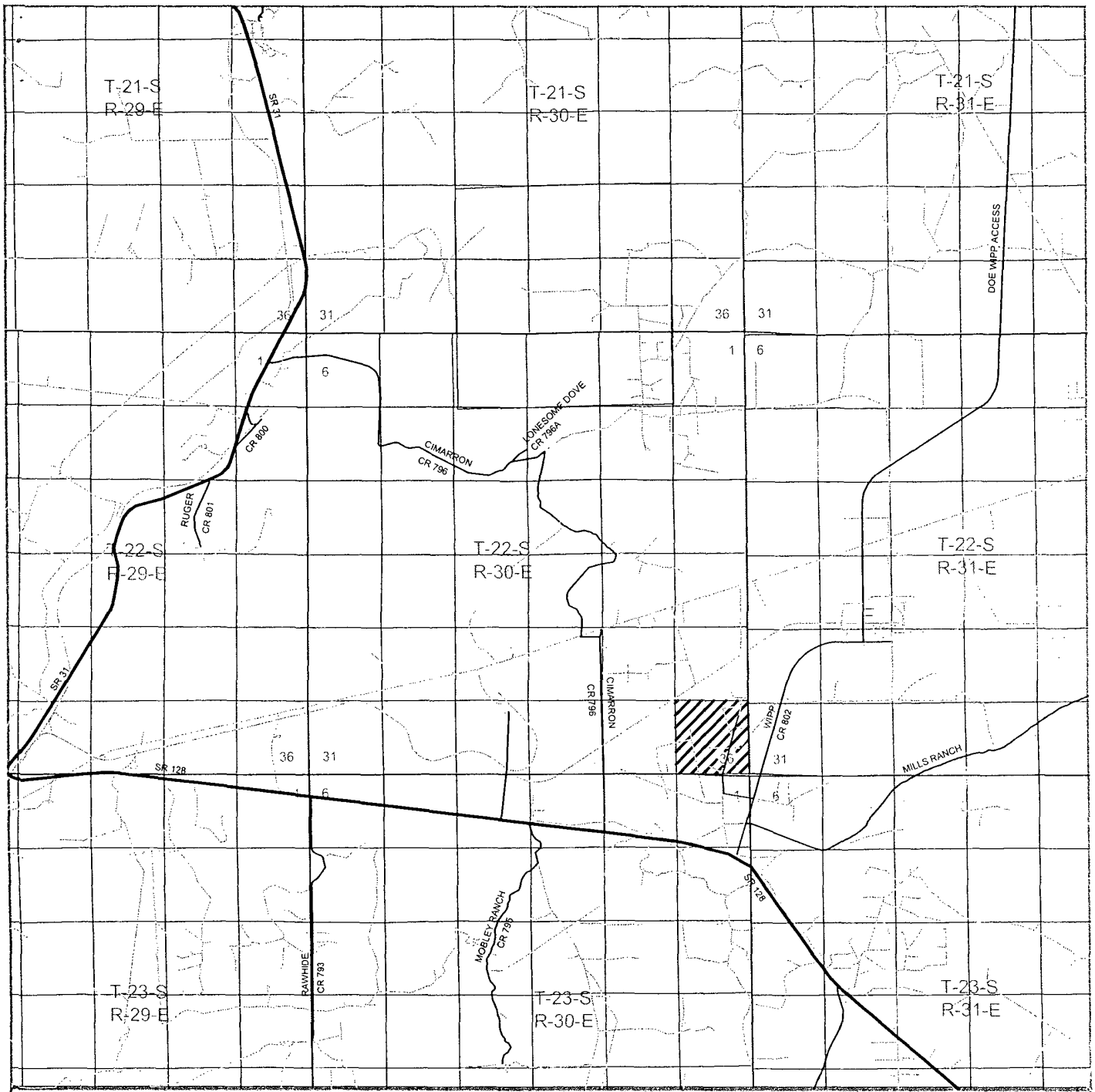
Basin Surveys
focused on excellence in the oilfield

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 22992
Survey Date: 06-25-2010
Scale: 1" = 2000'
Date: 05-28-2010

N

BOPCO, L.P.



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basinsurveys.com

W.O. Number: JMS 22992
Survey Date: 06-25-2010
Scale: 1" = 2 Miles
Date: 06-28-2010

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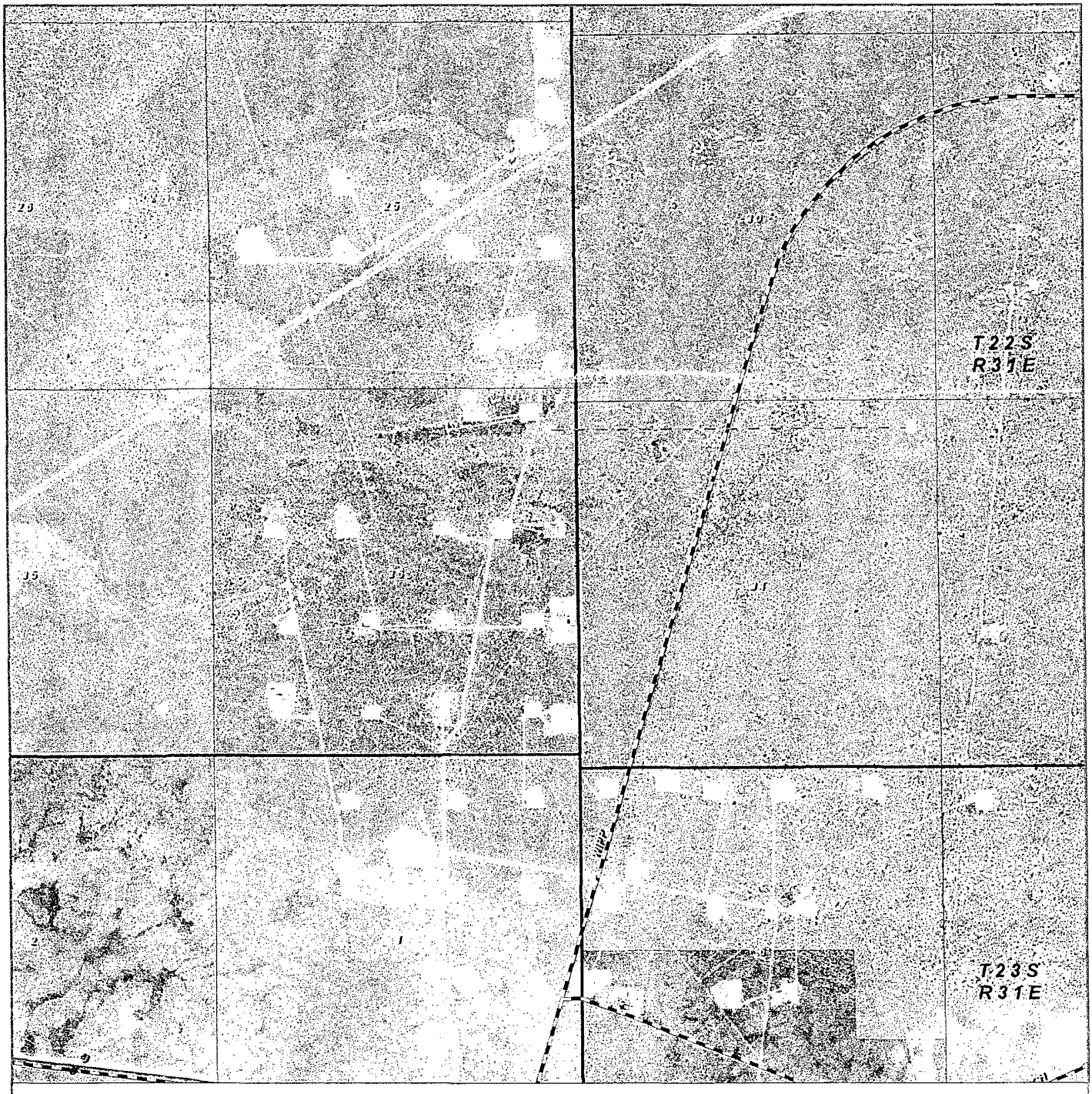
BOPCO, L.P.



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basinsurveys.com

W.O. Number: JMS 22992

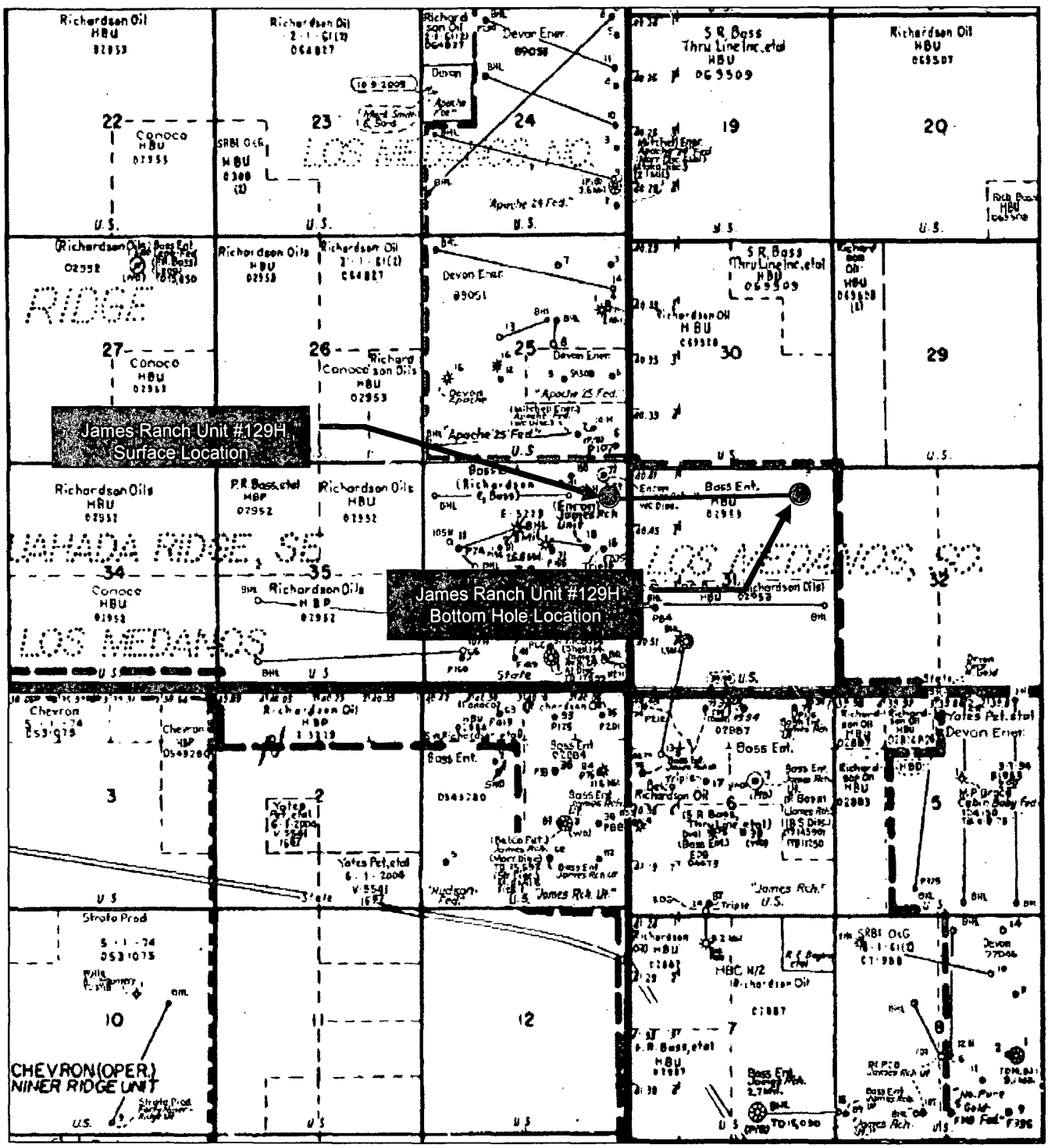
Scale: 1" = 2000'

YELLOW TINT - USA LAND
BLUE TINT - STATE LAND
NATURAL COLOR - FEE LAND

N

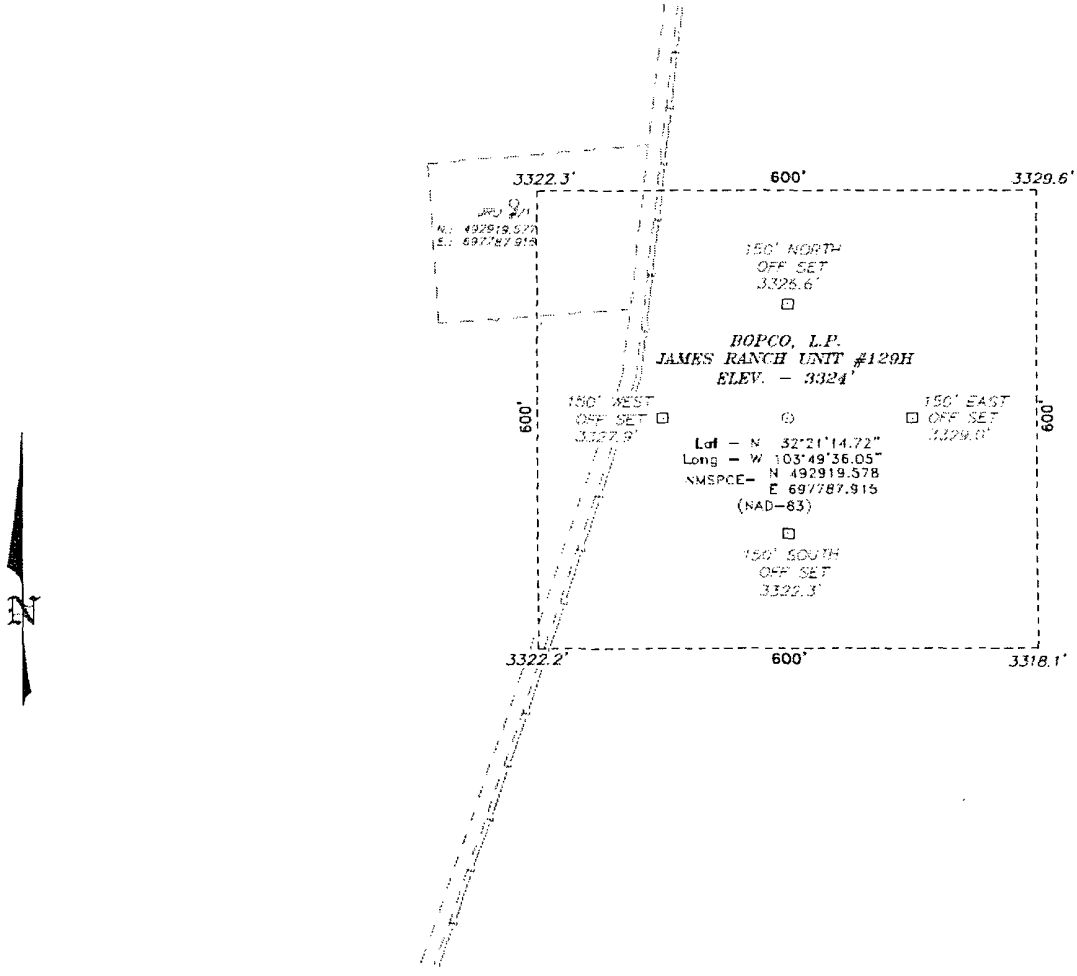
BOPCO, L.P.

James Ranch Unit #129H
Exhibit "A"



James Ranch Unit #129H
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 HWY 128 AND WIPP ROAD, GO NORTH ON WIPP ROAD 0.8 MILES TO LEASE ROAD, ON LEASE ROAD GO WEST 0.4 MILES TO LEASE ROAD, ON LEASE ROAD GO NORTH 2.0 MILES TO PROPOSED LOCATION.

BOPCO, L.P.

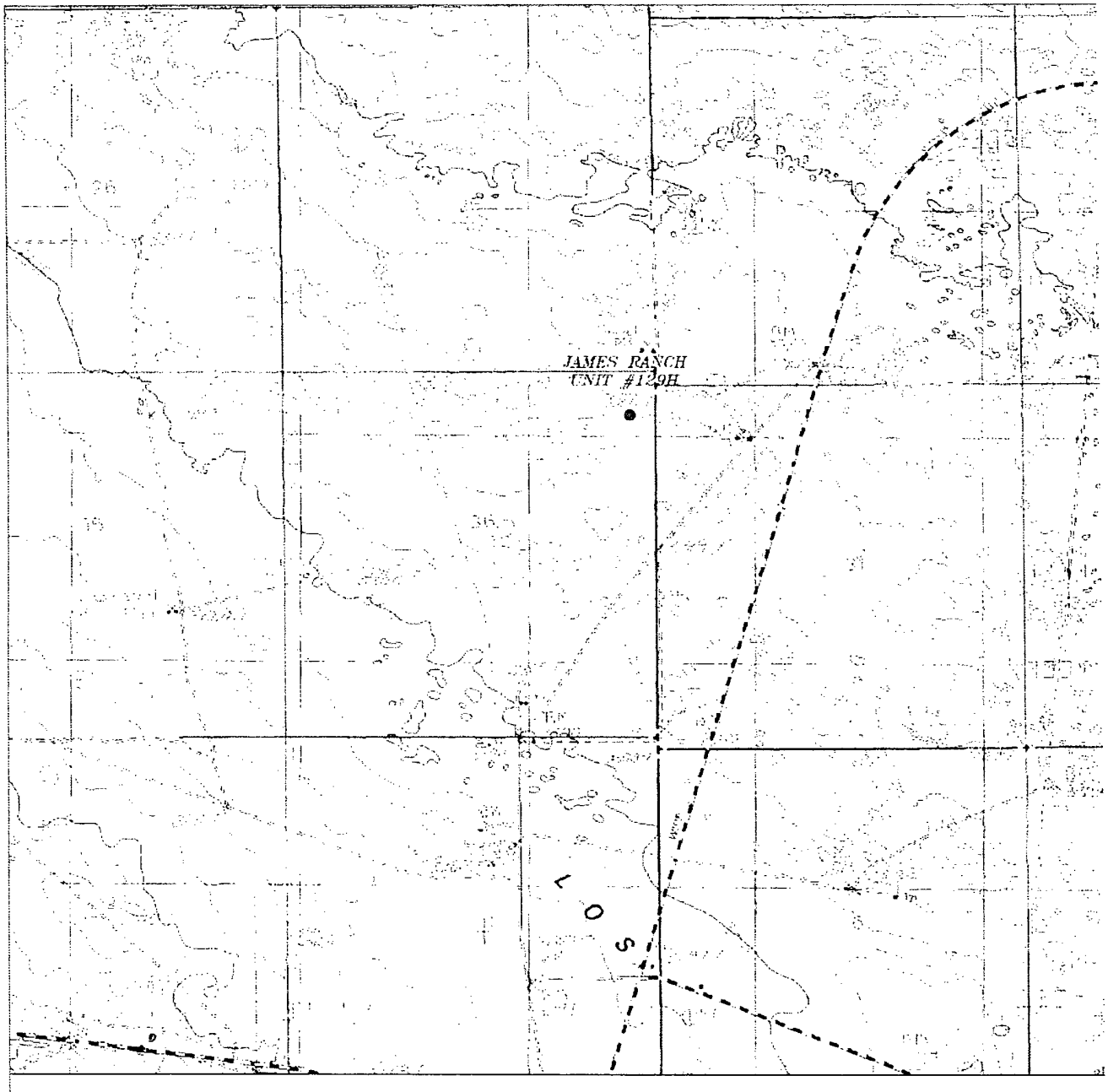
REF: JAMES RANCH UNIT #129H / WELL PAD TOPO

THE JAMES RANCH UNIT #129H LOCATED 630' FROM THE NORTH LINE AND 330' FROM THE EAST 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: 22992	Drawn By: J. SMALL		
Date: 06-28-2010	Disk: JMS 22992	Survey Date: 06-25-2010	Sheet 1 of 1 Sheets

James Ranch Unit #129H
Exhibit "C"



JAMES RANCH UNIT #129H
Located 630' FNL and 330' FEL
Section 36, Township 22 South, Range 30 East,
N.M.P.M., Eddy County, New Mexico.

James Ranch Unit #129
Exhibit "E"

JAMES RANCH UNIT #129H
Located 630' FNL and 330' FEL
Section 36, Township 22 South, Range 30 East,
N.M.P.M., Eddy County, New Mexico.

Surface casing to be set into the Rustler below all fresh water sands.

7" casing will be set at approximately 7,886' thru curve and cemented in two stages with DV tool set at approximately 5000'. Cement will be circulated to surface.

Production casing will be 4-1/2" run with Baker hydraulic packers. Top of 4-1/2" liner will be approximately 200' inside 7" casing (+/- 7886')

Drilling procedure, BOP diagram, and anticipated tops attached.

This well is located within the R111 Potash area. Potash waiver attached.

The surface and bottom hole locations are both orthodox.

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

EIGHT POINT DRILLING PROGRAM
BOPCO, L.P.

NAME OF WELL: James Ranch Unit #129H

LEGAL DESCRIPTION - SURFACE: 630' FNL, 330' FEL, Section 36, T22S, R30E, Eddy County, NM.
BHL: 430' FNL, 330' FEL, Section 31, T22S, R31E, 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 3343' (estimated)
GL 3324'

FORMATION	ESTIMATED TOP FROM KB TVD	MD	ESTIMATED SUB-SEA TOP	BEARING
T/Rustler	315'	315'	+ 3,028'	Barren
T/Salt	722'	722'	+ 2,621'	Barren
B/Salt	3,615	3,615'	- 272'	Barren
T/Lamar	3,863'	3,863'	- 520'	Barren
T/Ramsey	3,923'	3,923'	- 580'	Oil/Gas
T/Lwr Cherry Canyon	4,801'	4,801'	- 1,458'	Oil/Gas
KOP	7,103'	7,103'	- 3,760'	Oil/Gas
T/Brushy Canyon "U" Sand	7,252'	7,254'	- 3,909'	Oil/Gas
T/Lwr Brushy Canyon "8A"	7,444'	7,482'	- 4,101'	Oil/Gas
T/Lwr Brushy Canyon "W" Sand	7,541'	7,657'	- 4,198'	Oil/Gas
EOC	7,580'	7,836'	- 4,237'	Oil/Gas
TD Horizontal Hole	7,750'	12,673'	- 4,407'	Oil/Gas

POINT 3: CASING PROGRAM See COA

TYPE	INTERVALS (MD)	Hole Size	PURPOSE	CONDITION
20"	0'- 60'	24"	Conductor	Contractor Discretion
13-3/8", 48#, H-40, 8rd, ST&C	0' - ~~712~~ 425'	17-1/2"	Surface	New
9-5/8", 40#, J-55, 8rd, LT&C	0' - 3,883'	12-1/4"	Intermediate	New
7", 26#, N-80, 8rd, LT&C	0' - 7,886'	8/3/4"	Production	New
4-1/2", 11.6#, HCP-110, 8rd, LT&C	7886' – 12,673'	6-1/8"	Production	New

CASING DESIGN SAFETY FACTORS:

TYPE	TENSION	COLLAPSE	BURST
13-3/8", 48#, H-40, 8rd, ST&C	12.88	2.22	2.48
9-5/8", 40#, J-55, 8rd, LT&C	3.95	1.27	1.11
7", 26#, N-80, 8rd, LT&C	3.06	1.49	1.45
4-1/2", 11.6#, HCP-110, 8rd, LT&C	5.61	2.38	2.14

DESIGN CRITERIA AND CASING LOADING ASSUMPTIONS:

SURFACE CASING - (13-3/8")

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 - (9-5/8")

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.

2ND INTERMEDIATE CASING - (7")

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 (5000 psig) on top of the maximum anticipated packer fluid gradient. (0.433 psi/ft) Backup on production strings will be formation pore pressure. (0.433 psi/ft) The effects of tension on burst will not be utilized.

PRODUCTION CASING - (4-1/2")

Tension — A 1.6 design factor utilizing the effects of buoyancy (9.0 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 (5000 psig) on top of the maximum anticipated packer fluid gradient. (0.433 psi/ft) Backup on production strings will be formation pore pressure. (0.433 psi/ft) 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 (5000 psi WP) and a bag type (Hydril) annular preventer (5000 psi WP). The same BOPE will be installed on the surface casinghead and on all subsequent casing strings. The BOP stack, chokes, kill lines, upper and lower kelly cocks, inside BOP, choke manifold when installed on the surface casinghead will be hydro-tested to 200 psig & 2000 psig by a independent tester. The BOP stack, chokes, kill lines, upper and lower kelly cocks, inside BOP, choke manifold, when rigged up on the intermediate casing spool will be tested to 3000 psig by independent tester. (hydril to 2500 psig) In addition to the high pressure test, a low pressure (250 psig) test will be required.

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 See COA

DEPTH	MUD TYPE	WEIGHT	FV	PV	YP	FL	Ph
0' - ~~712'~~ 475'	FW Spud Mud	8.5 – 9.2	38-70	NC	NC	NC	10.0
475' ~~712'~~ - 3,883'	Brine Water	9.8 – 10.2	28-30	NC	NC	NC	9.5 – 10.5
3,883' - 7,886'	FW/Gel	8.7 – 9.0	28-36	NC	NC	NC	9.5 – 10.0
7,886' – 12,673'	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. See COA

B) LOGGING

Run #1: GR with MWD during drilling of build and horizontal portions of 8-3/4" hole.
Run #2: Drill pipe conveyed Caliper-GR from TD thru curve.
Run #3: GR/CNL from 9-5/8" casing shoe to surface will be run as part of initial completion procedure.

C) CONVENTIONAL CORING

None anticipated

D) CEMENT

INTERVAL	AMOUNT SXS	FT OF FILL	TYPE	GALS/SX	PPG	FT^3/SX
SURFACE:						
Lead: 0 - 412' (100% excess Circ to surface)	329	412	Class "C" + 4% Extender + 2% $CaCl_2$	9.15	13.50	1.74
Tail: 412' - ~~712'~~ 475' (100% excess)	335	300	Class "C" + 2% $CaCl_2$	6.35	14.80	1.34
INTERMEDIATE:						
Lead: 0' - 3383' (100% excess Circ to surface)	1019	3383	35/65 Poz + 5% NaCl + 0.20% Anti Foam + 6% Extender + 0.125 pps Lost circulation material	11.44	12.60	2.08
Tail: 3383' - 3883' (100% excess)	269	500	Class "C"	6.36	14.80	1.33
2nd INTERMEDIATE:						
Stage 1: Lead: 5000' - 7886' (50% excess)	294	2886	LiteCrete + 3 pps Extender + 0.20% Anti Foam + 0.30% Retarder + 0.30% Dispersant	7.48	10.20	2.18
DV Tool @ 5,000'						
Stage 2: Lead: 0' - 4900' (50% excess Circ to surface)	558	4900	35/65 Poz + 5% NaCl + 0.60% Extender + 0.20% Anti Foam	10.92	12.60	1.98
Tail: 4900' - 5000' (50% excess)	20	100	Class "C" + 0.20% Retarder	6.35	14.80	1.33

E) DIRECTIONAL DRILLING

BOPCO, L.P. plans to drill out the 9-5/8" intermediate casing with an 8-3/4" bit to a TVD of approximately 7103'. At this depth an 8-3/4" directional hole will be initiated at an azimuth of 89.75°, building angle at 12.00°/100' to a max of 87.988° at a TVD of 7580' (MD 7836'). This direction will be maintained to a MD of 7886'. At this depth 7" casing will be installed with DV Tool at 5000' and cemented with cement circulated to the surface. A 6-1/8" open hole will be drilled thru the lateral to a MD of 12,673' (TVD 7750'). 4-1/2" casing will be installed in the lateral using Baker Hydraulic packers to isolated pay intervals in the "W" Sand.

POINT 7: ANTICIPATED RESERVOIR CONDITIONS

Normal pressures are anticipated throughout Delaware section. A BHP of 3581 psi (max) or MWE of 8.4 ppg is expected. Lost circulation may exist in the Delaware Section from 4047'-7750' 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

Est. Spud Date 11/1/10

30 days drilling operations

14 days completion operations

Gary Gerhard

GEG/mac
March 19, 2010

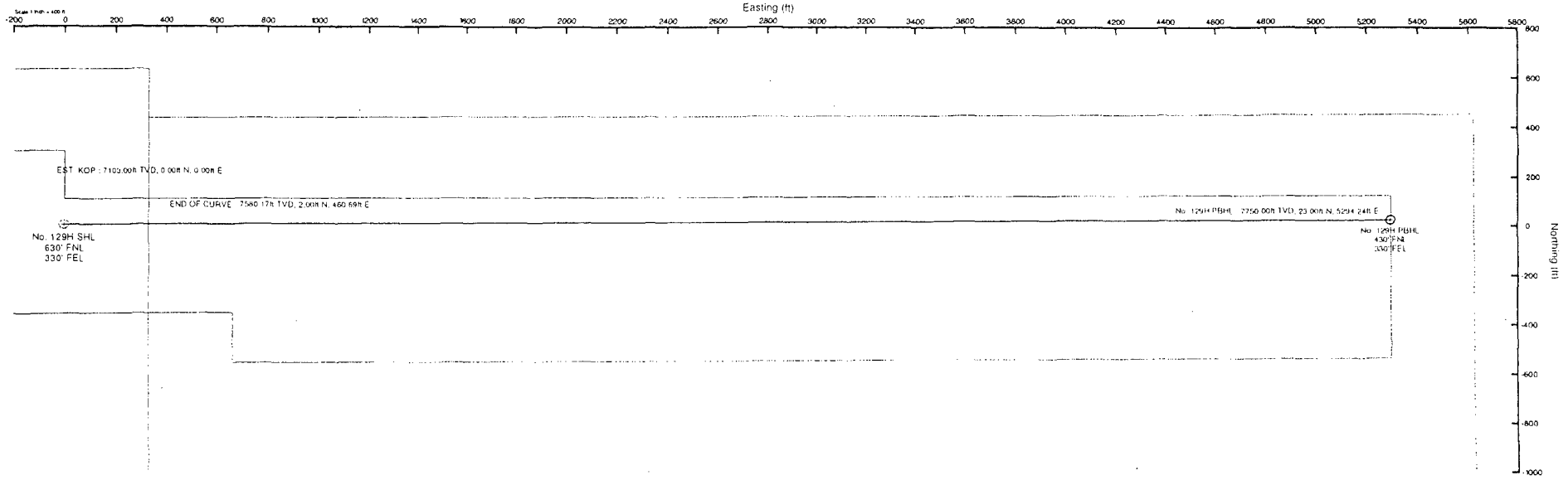
BOPCO, L.P.

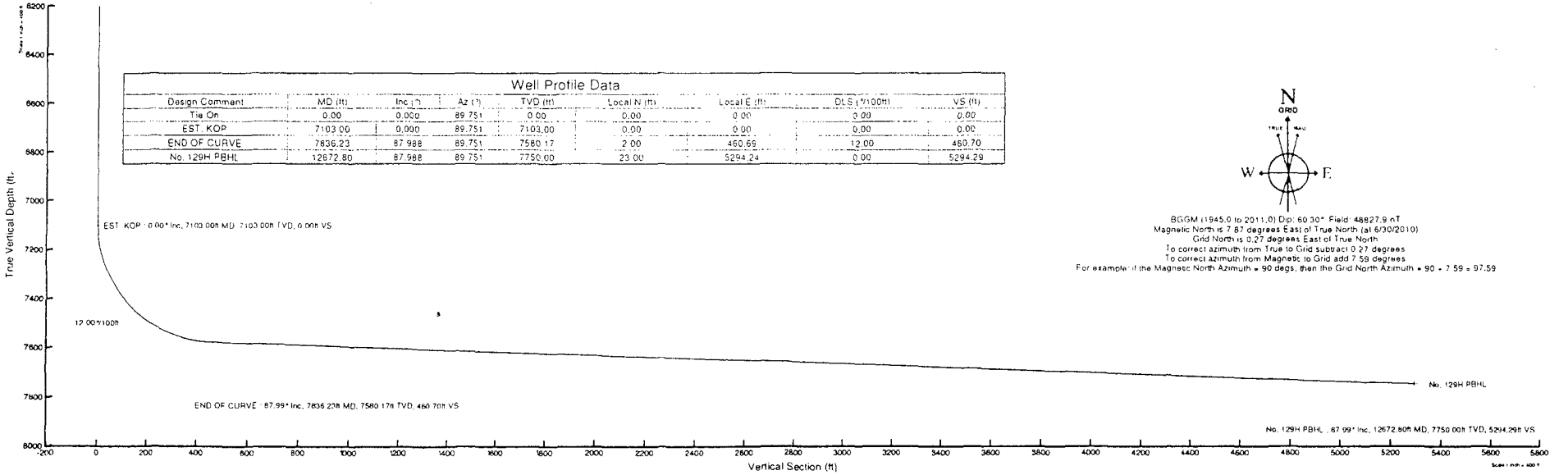
Location: Eddy County, NM
Field: (JRU) Quahada Ridge, SE (Delaware)
Facility: James Ranch Unit No. 129H

Slot: No. 129H SHL
Well: No. 129H
Wellbore: No. 129H PWB

Plot reference wellpath is Prelim_1	
True vertical depths are referenced to Rig on No. 129H SHL (R1)	Grid System: NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on No. 129H SHL (R1)	North Reference: Grid north
Rig on No. 129H SHL (R1) to Mean Sea Level: 3343 feet	Scale: True distance
Mean Sea Level to Mud line (Facility: James Ranch Unit No. 129H): -3324 feet	Depths are in feet
Coordinates are in feet referenced to SL	Created by: Victor Hernandez on 7/1/2010

BAKER HUGHES





Azimuth 89.75° with reference 0.00 N, 0.00 E

Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	0.00	0.000	89.751	0.00	0.00	0.00	0.00	0.00
EST. KOP	7103.00	0.000	89.751	7103.00	0.00	0.00	0.00	0.00
END OF CURVE	7836.23	87.988	89.751	7580.17	2.00	460.69	12.00	460.70
No. 129H PBHL	12672.80	87.988	89.751	7750.00	23.00	5294.24	0.00	5294.29

BGGM (1945.0 to 2011.0) Dip: 60.30° Field: 48827.9 nT
Magnetic North is 7.87 degrees East of True North (at 6/30/2010)
Grid North is 0.27 degrees East of True North
To correct azimuth from True to Grid subtract 0.27 degrees
To correct azimuth from Magnetic to Grid add 7.59 degrees
For example: if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.59 = 97.59

Planned Wellpath Report

Prelim_1

BAKER HUGHES

REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No. 129H SHL
Area	Eddy County, NM	Well	No. 129H
Field	(JRU) Quahada Ridge, SE (Delaware)	Wellbore	No. 129H PWB
Facility	James Ranch Unit No. 129H		

REPORT SETUP INFORMATION			
Projection System	NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet	Software System	WellArchitect® 2.0
North Reference	Grid	User	Victor Hernandez
Scale	0.999937	Report Generated	7/1/2010 at 11:03:51 AM
Convergence at slot	0.27° East	Database/Source file	WA_Midland/No._129H_PWB.xml

WELLPATH LOCATION	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	0.00	0.00	697787.92	492919.58	32°21'14.720"N	103°49'36.052"W
Facility Reference Pt			697787.92	492919.58	32°21'14.720"N	103°49'36.052"W
Field Reference Pt			696627.35	492798.47	32°21'13.576"N	103°49'49.589"W

WELLPATH DATUM			
Calculation method	Minimum curvature	Rig on No. 129H SHL (RT) to GL	19.00ft
Horizontal Reference Pt	SL	Rig on No. 129H SHL (RT) to Mean Sea Level	3343.00ft
Vertical Reference Pt	Rig on No. 129H SHL (RT)	GL to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on No. 129H SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	89.75°

Planned Wellpath Report

Prelim_1

BAKER HUGHES

REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No. 129H SHL
Area	Eddy County, NM	Well	No. 129H
Field	(JRU) Quahada Ridge, SE (Delaware)	Wellbore	No. 129H PWB
Facility	James Ranch Unit No. 129H		

WELLPATH DATA (68 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00	0.000	89.751	0.00	0.00	0.00	0.00	697787.92	492919.58	32°21'14.720"N	103°49'36.052"W	0.00	Tie On
315.00†	0.000	89.751	315.00	0.00	0.00	0.00	697787.92	492919.58	32°21'14.720"N	103°49'36.052"W	0.00	Rustler
722.00†	0.000	89.751	722.00	0.00	0.00	0.00	697787.92	492919.58	32°21'14.720"N	103°49'36.052"W	0.00	Salt
3615.00†	0.000	89.751	3615.00	0.00	0.00	0.00	697787.92	492919.58	32°21'14.720"N	103°49'36.052"W	0.00	B / Salt
3865.00†	0.000	89.751	3865.00	0.00	0.00	0.00	697787.92	492919.58	32°21'14.720"N	103°49'36.052"W	0.00	Lamar Lime
3923.00†	0.000	89.751	3923.00	0.00	0.00	0.00	697787.92	492919.58	32°21'14.720"N	103°49'36.052"W	0.00	Ramsey
4801.00†	0.000	89.751	4801.00	0.00	0.00	0.00	697787.92	492919.58	32°21'14.720"N	103°49'36.052"W	0.00	Cherry Canyon
7103.00	0.000	89.751	7103.00	0.00	0.00	0.00	697787.92	492919.58	32°21'14.720"N	103°49'36.052"W	0.00	EST. KOP
7203.00†	12.000	89.751	7202.27	10.43	0.05	10.43	697798.35	492919.62	32°21'14.720"N	103°49'35.931"W	12.00	
7254.53†	18.184	89.751	7252.00	23.84	0.10	23.84	697811.76	492919.68	32°21'14.720"N	103°49'35.774"W	12.00	Brushy Canyon U
7303.00†	24.000	89.751	7297.20	41.28	0.18	41.28	697829.19	492919.76	32°21'14.720"N	103°49'35.571"W	12.00	
7403.00†	36.000	89.751	7383.65	91.19	0.40	91.19	697879.10	492919.97	32°21'14.720"N	103°49'34.989"W	12.00	
7482.81†	45.577	89.751	7444.00	143.26	0.62	143.26	697931.17	492920.20	32°21'14.720"N	103°49'34.382"W	12.00	Lo Brushy Canyon 8A
7503.00†	48.000	89.751	7457.83	157.98	0.69	157.98	697945.88	492920.26	32°21'14.720"N	103°49'34.211"W	12.00	
7603.00†	60.000	89.751	7516.50	238.73	1.04	238.73	698026.63	492920.62	32°21'14.719"N	103°49'33.269"W	12.00	
7657.51†	66.541	89.751	7541.00	287.39	1.25	287.39	698075.28	492920.83	32°21'14.719"N	103°49'32.702"W	12.00	LBC W Sand
7703.00†	72.000	89.751	7557.10	329.92	1.43	329.92	698117.81	492921.01	32°21'14.719"N	103°49'32.206"W	12.00	
7803.00†	84.000	89.751	7577.85	427.56	1.86	427.55	698215.44	492921.44	32°21'14.719"N	103°49'31.068"W	12.00	
7836.23	87.988	89.751	7580.17	460.70	2.00	460.69	698248.58	492921.58	32°21'14.718"N	103°49'30.682"W	12.00	END OF CURVE
7903.00†	87.988	89.751	7582.51	527.41	2.29	527.42	698315.30	492921.87	32°21'14.718"N	103°49'29.904"W	0.00	
8003.00†	87.988	89.751	7586.03	627.37	2.73	627.36	698415.23	492922.30	32°21'14.718"N	103°49'28.739"W	0.00	
8103.00†	87.988	89.751	7589.54	727.30	3.16	727.30	698515.16	492922.74	32°21'14.717"N	103°49'27.574"W	0.00	
8203.00†	87.988	89.751	7593.05	827.24	3.59	827.23	698615.10	492923.17	32°21'14.717"N	103°49'26.409"W	0.00	
8303.00†	87.988	89.751	7596.56	927.18	4.03	927.17	698715.03	492923.61	32°21'14.717"N	103°49'25.244"W	0.00	
8403.00†	87.988	89.751	7600.07	1027.12	4.46	1027.11	698814.96	492924.04	32°21'14.716"N	103°49'24.079"W	0.00	
8503.00†	87.988	89.751	7603.58	1127.06	4.90	1127.05	698914.89	492924.47	32°21'14.716"N	103°49'22.914"W	0.00	
8603.00†	87.988	89.751	7607.09	1227.00	5.33	1226.98	699014.82	492924.91	32°21'14.715"N	103°49'21.749"W	0.00	
8703.00†	87.988	89.751	7610.61	1326.93	5.77	1326.92	699114.75	492925.34	32°21'14.715"N	103°49'20.584"W	0.00	
8803.00†	87.988	89.751	7614.12	1426.87	6.20	1426.86	699214.68	492925.78	32°21'14.714"N	103°49'19.419"W	0.00	
8903.00†	87.988	89.751	7617.63	1526.81	6.63	1526.80	699314.61	492926.21	32°21'14.714"N	103°49'18.254"W	0.00	

Planned Wellpath Report

Prelim_1

BAKER HUGHES

REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No. 129H SHL
Area	Eddy County, NM	Well	No. 129H
Field	(JRU) Quahada Ridge, SE (Delaware)	Wellbore	No. 129H PWB
Facility	James Ranch Unit No. 129H		

WELLPATH DATA (68 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
9003.00†	87.988	89.751	7621.14	1626.75	7.07	1626.73	699414.54	492926.65	32°21'14.714"N	103°49'17.089"W	0.00	
9103.00†	87.988	89.751	7624.65	1726.69	7.50	1726.67	699514.47	492927.08	32°21'14.713"N	103°49'15.924"W	0.00	
9203.00†	87.988	89.751	7628.16	1826.63	7.94	1826.61	699614.40	492927.51	32°21'14.713"N	103°49'14.759"W	0.00	
9303.00†	87.988	89.751	7631.67	1926.56	8.37	1926.55	699714.34	492927.95	32°21'14.712"N	103°49'13.594"W	0.00	
9403.00†	87.988	89.751	7635.19	2026.50	8.81	2026.48	699814.27	492928.38	32°21'14.712"N	103°49'12.429"W	0.00	
9503.00†	87.988	89.751	7638.70	2126.44	9.24	2126.42	699914.20	492928.82	32°21'14.711"N	103°49'11.264"W	0.00	
9603.00†	87.988	89.751	7642.21	2226.38	9.67	2226.36	700014.13	492929.25	32°21'14.711"N	103°49'10.099"W	0.00	
9703.00†	87.988	89.751	7645.72	2326.32	10.11	2326.30	700114.06	492929.69	32°21'14.711"N	103°49'08.934"W	0.00	
9803.00†	87.988	89.751	7649.23	2426.26	10.54	2426.23	700213.99	492930.12	32°21'14.710"N	103°49'07.769"W	0.00	
9903.00†	87.988	89.751	7652.74	2526.19	10.98	2526.17	700313.92	492930.55	32°21'14.710"N	103°49'06.604"W	0.00	
10003.00†	87.988	89.751	7656.25	2626.13	11.41	2626.11	700413.85	492930.99	32°21'14.709"N	103°49'05.439"W	0.00	
10103.00†	87.988	89.751	7659.76	2726.07	11.84	2726.04	700513.78	492931.42	32°21'14.709"N	103°49'04.274"W	0.00	
10203.00†	87.988	89.751	7663.28	2826.01	12.28	2825.98	700613.71	492931.86	32°21'14.708"N	103°49'03.109"W	0.00	
10303.00†	87.988	89.751	7666.79	2925.95	12.71	2925.92	700713.64	492932.29	32°21'14.708"N	103°49'01.944"W	0.00	
10403.00†	87.988	89.751	7670.30	3025.89	13.15	3025.86	700813.58	492932.73	32°21'14.707"N	103°49'00.779"W	0.00	
10503.00†	87.988	89.751	7673.81	3125.82	13.58	3125.79	700913.51	492933.16	32°21'14.707"N	103°48'59.614"W	0.00	
10603.00†	87.988	89.751	7677.32	3225.76	14.02	3225.73	701013.44	492933.59	32°21'14.706"N	103°48'58.449"W	0.00	
10703.00†	87.988	89.751	7680.83	3325.70	14.45	3325.67	701113.37	492934.03	32°21'14.706"N	103°48'57.284"W	0.00	
10803.00†	87.988	89.751	7684.34	3425.64	14.88	3425.61	701213.30	492934.46	32°21'14.705"N	103°48'56.119"W	0.00	
10903.00†	87.988	89.751	7687.86	3525.58	15.32	3525.54	701313.23	492934.90	32°21'14.705"N	103°48'54.954"W	0.00	
11003.00†	87.988	89.751	7691.37	3625.52	15.75	3625.48	701413.16	492935.33	32°21'14.704"N	103°48'53.789"W	0.00	
11103.00†	87.988	89.751	7694.88	3725.45	16.19	3725.42	701513.09	492935.76	32°21'14.704"N	103°48'52.624"W	0.00	
11203.00†	87.988	89.751	7698.39	3825.39	16.62	3825.36	701613.02	492936.20	32°21'14.703"N	103°48'51.459"W	0.00	
11303.00†	87.988	89.751	7701.90	3925.33	17.06	3925.29	701712.95	492936.63	32°21'14.703"N	103°48'50.294"W	0.00	
11403.00†	87.988	89.751	7705.41	4025.27	17.49	4025.23	701812.88	492937.07	32°21'14.702"N	103°48'49.129"W	0.00	
11503.00†	87.988	89.751	7708.92	4125.21	17.92	4125.17	701912.82	492937.50	32°21'14.702"N	103°48'47.964"W	0.00	
11603.00†	87.988	89.751	7712.44	4225.15	18.36	4225.11	702012.75	492937.93	32°21'14.701"N	103°48'46.799"W	0.00	
11703.00†	87.988	89.751	7715.95	4325.08	18.79	4325.04	702112.68	492938.37	32°21'14.701"N	103°48'45.634"W	0.00	
11803.00†	87.988	89.751	7719.46	4425.02	19.23	4424.98	702212.61	492938.80	32°21'14.700"N	103°48'44.469"W	0.00	
11903.00†	87.988	89.751	7722.97	4524.96	19.66	4524.92	702312.54	492939.24	32°21'14.700"N	103°48'43.304"W	0.00	

Planned Wellpath Report

Prelim_1

BAKER HUGHES

REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No. 129H SHL
Area	Eddy County, NM	Well	No. 129H
Field	(JRU) Quahada Ridge, SE (Delaware)	Wellbore	No. 129H PWB
Facility	James Ranch Unit No. 129H		

WELLPATH DATA (68 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12003.00†	87.988	89.751	7726.48	4624.90	20.10	4624.86	702412.47	492939.67	32°21'14.699"N	103°48'42.139"W	0.00	
12103.00†	87.988	89.751	7729.99	4724.84	20.53	4724.79	702512.40	492940.11	32°21'14.699"N	103°48'40.974"W	0.00	
12203.00†	87.988	89.751	7733.50	4824.78	20.96	4824.73	702612.33	492940.54	32°21'14.698"N	103°48'39.809"W	0.00	
12303.00†	87.988	89.751	7737.01	4924.71	21.40	4924.67	702712.26	492940.97	32°21'14.698"N	103°48'38.644"W	0.00	
12403.00†	87.988	89.751	7740.53	5024.65	21.83	5024.60	702812.19	492941.41	32°21'14.697"N	103°48'37.479"W	0.00	
12503.00†	87.988	89.751	7744.04	5124.59	22.27	5124.54	702912.12	492941.84	32°21'14.697"N	103°48'36.314"W	0.00	
12603.00†	87.988	89.751	7747.55	5224.53	22.70	5224.48	703012.06	492942.28	32°21'14.696"N	103°48'35.149"W	0.00	
12672.80	87.988	89.751	7750.00	5294.29	23.00	5294.24	703081.81	492942.58	32°21'14.696"N	103°48'34.335"W	0.00	No. 129H PBHL

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) No. 129H PBHL	12672.80	7750.00	23.00	5294.24	703081.81	492942.58	32°21'14.696"N	103°48'34.335"W	point

SURVEY PROGRAM Ref Wellbore: No. 129H PWB Ref Wellpath: Prelim_1

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
19.00	12672.80	NaviTrak (Standard)		No. 129H PWB

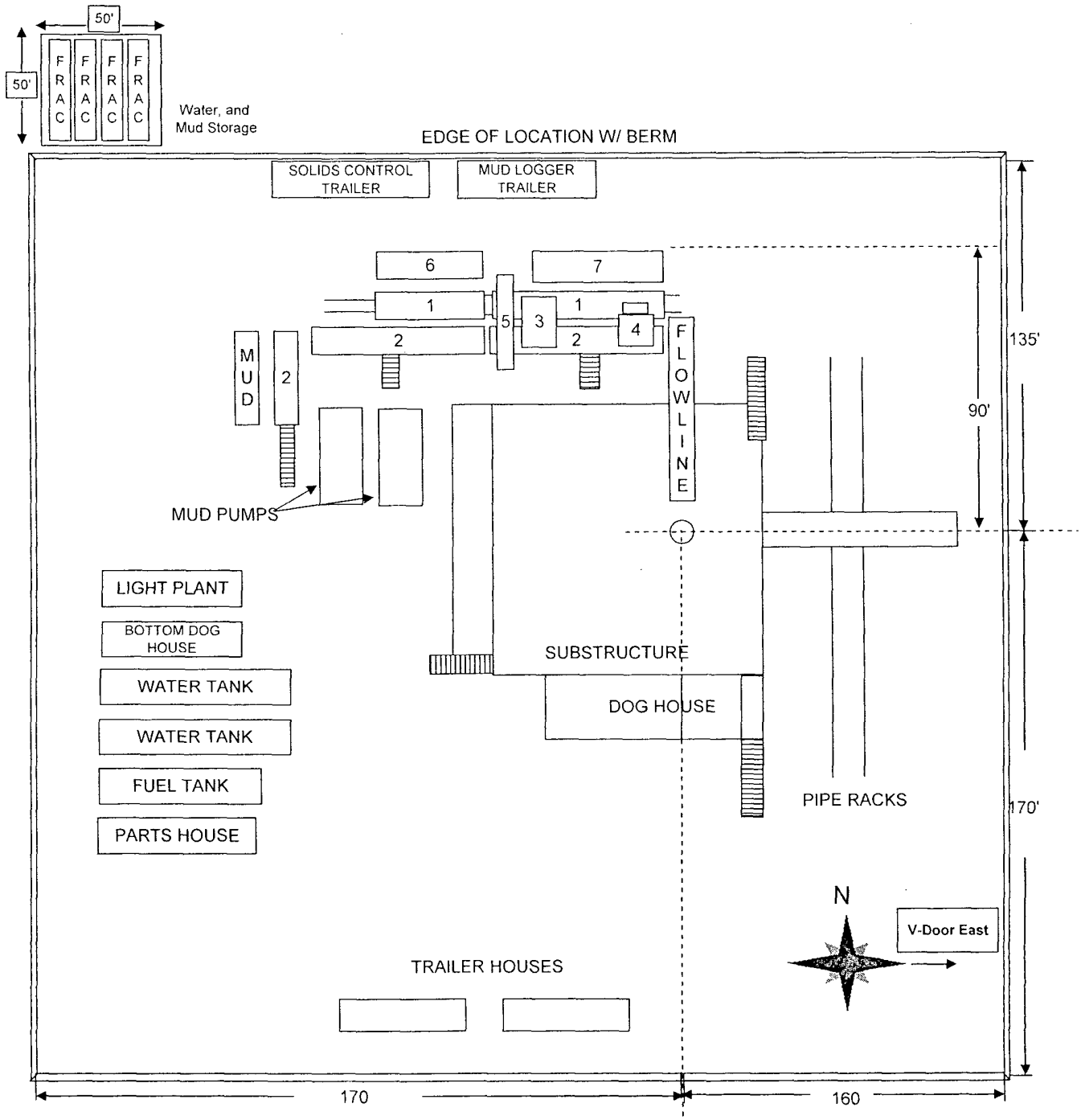
BOPCO, L.P.
James Ranch Unit #129H
Sec 36, T22S-R30E
Eddy County, NM

Exhibit "D"

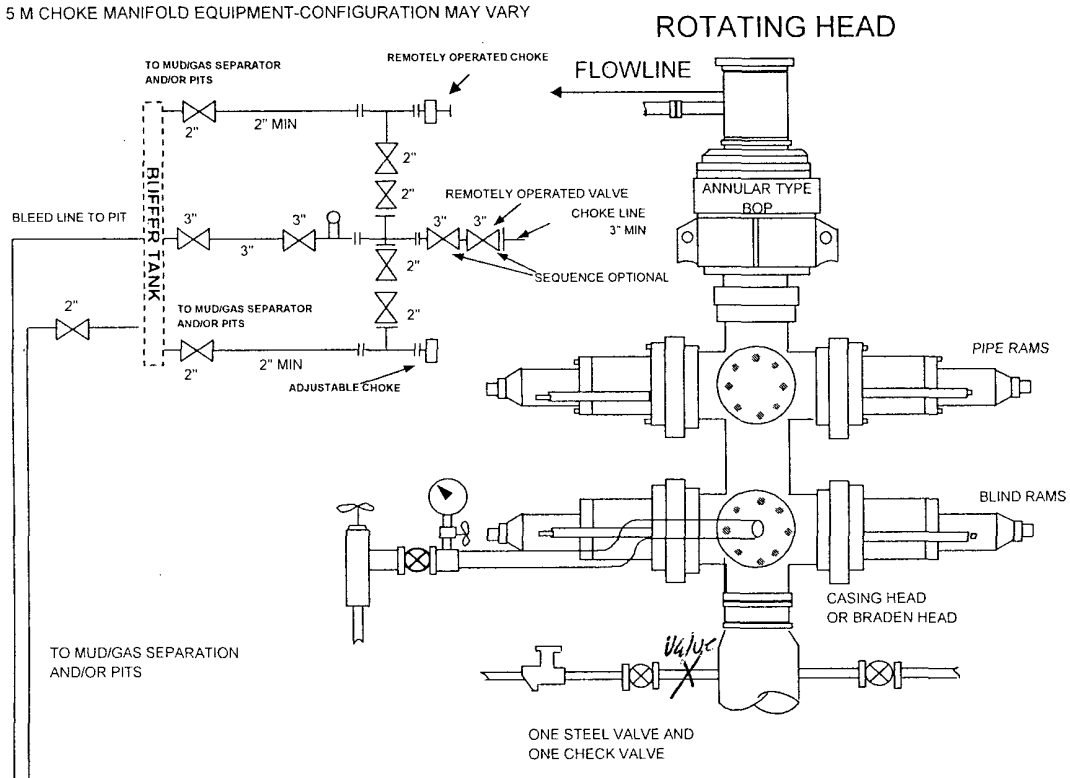
RIG LAYOUT SCHEMATIC (McVay Rig #5)
INCLUSIVE OF CLOSED-LOOP DESIGN PLAN

Solids Control Equipment Legend

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



BOPCO, L. P.
5-M WP BOPE WITH 5-M WP ANNULAR



THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS

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

DIAGRAM 2

TO STEEL MUD TANKS

BLEED LINE TO STEEL PIT (NOT CONNECTED TO BUFFER TANK

Mosaic Potash Carlsbad Inc.
PO Box 71
1361 Potash Mines Road
Carlsbad, NM 88220
www.mosaicco.com

Tel 505-887-2871
Fax 505-887-0589

July 16, 2010

Mr. Brad Glasscock
Bass Enterprises Production Co.
201 Main Street
Fort Worth, TX 76102-3131
(817) 339-7185

Dear Mr. Glasscock:

We are in receipt of your email request dated July 1 concerning a test well (JRU 129H) at a surface location 630 FNL and 330 FEL in Section 36, T-22-S, R-30-E. Mosaic Potash Carlsbad Inc. does have the potash lease that covers this area. However, the previous drilling in this section has already precluded mining of any potash that may have been present.

Therefore Mosaic has no objection to Bass drilling a test well at this surface location. A well drilled at this location will cause no further waste of potash. We applaud your use of directional drilling mitigate the impact of drilling on adjacent rights holders.

Sincerely,

Dan Morehouse
Mine Engineering Superintendent

cc: Bill Boyer Pete Livingstone

MULTI-POINT SURFACE USE PLAN

NAME OF WELL: James Ranch Unit #129H

LEGAL DESCRIPTION - SURFACE: 630' FNL, 330' FEL, Section 36, T22S, R30E, Eddy County, NM.
BHL: 430' FNL, 330' FEL, Section 31, T22S, R31E, Eddy County, New Mexico.

POINT 1: EXISTING ROADS

A) Proposed Well Site Location:

See Exhibit "A".

B) Existing Roads:

From the junction of State Hwy 128 and WIPP Road, go northeasterly on WIPP Road 0.8 miles to lease road. On lease road go West 0.4 miles to lease road, on lease road go northeasterly 2.0 miles to proposed lease road.

C) Existing Road Maintenance or Improvement Plan:

See Exhibit "B"

POINT 2: NEW PLANNED ACCESS ROUTE

A) Route Location:

Will use existing lease road (See Exhibit "B") serving James Ranch Unit #71.

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 "A" 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. 2-7/8" steel flow line will be laid on top of ground and will follow existing roads to JRU #19 Battery. Power lines will be extended from the James Ranch Unit #71 pad (75' west) to the James Ranch Unit #129H. New right-of-way will not be needed. (See Exhibit "E")

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

Existing roads will be upgraded. (See Exhibits "B".)

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 "D".

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 5 and Sec 6, T23S, R31E.

G) Residences and Buildings

The Mills ranch house is located approximately 1 1/2 mile southeast of this location.

H) Historical Sites

None observed.

I) Archeological Resources

This location, road, flowline, and power lines are covered under the MOA. Checks for location, flowline, power line, and road fees are attached. ($1339 for location, road, power line and flowlines) Any location or construction conflicts will be resolved before construction begins.

J) Surface Ownership

The well site is on state owned minerals bottom hole is on federal minerals. 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
Stephen Martinez
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

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.

7/26/10
Date

Gary Gerhard
Gary Gerhard

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	BOPCO, LP.
LEASE NO.:	NM02953
WELL NAME & NO.:	JAMES RANCH UNIT #129H
SURFACE HOLE FOOTAGE:	630' FNL & 330' FEL, Sec. 36, T. 22 S., R. 30 E.
BOTTOM HOLE FOOTAGE	430' FNL & 330' FEL,
LOCATION:	Sec. 31, 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)

Cave and Karst

** Depending on location, additional Drilling, Casing, and Cementing procedures may be required by engineering to protect critical karst groundwater recharge areas.

Cave/Karst Surface Mitigation

The following stipulations will be applied to minimize impacts during construction, drilling and production.

Construction:
In the advent that any underground voids are opened up during construction activities, construction activities will be halted and the BLM will be notified immediately.

No Blasting:
No blasting will be utilized for pad construction. The pad will be constructed and leveled by adding the necessary fill and caliche.

Pad Berming:
The pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the pad. All sides will be bermed.

Tank Battery Liners and Berms:
Tank battery locations will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank.

Leak Detection System:
A method of detecting leaks is required. The method could incorporate gauges to measure loss, situating values and lines so they can be visually inspected, or installing electronic sensors to alarm when a leak is present. Leak detection plan will be submitted to BLM for approval.

Automatic Shut-off Systems:
Automatic shut off, check values, or similar systems will be installed for pipelines and tanks to minimize the effects of catastrophic line failures used in production or drilling.

Cave/Karst Subsurface Mitigation

The following stipulations will be applied to protect cave/karst and ground water concerns:

Rotary Drilling with Fresh Water:
Fresh water will be used as a circulating medium in zones where caves or karst features are expected. SEE ALSO: Drilling COAs for this well.

Directional Drilling:
Kick off for directional drilling will occur at least 100 feet below the bottom of the cave occurrence zone. SEE ALSO: Drilling COAs for this well.

Lost Circulation:
ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported in the drilling report.

Regardless of the type of drilling machinery used, if a void of four feet or more and circulation losses greater than 70 percent occur simultaneously while drilling in any cave-bearing zone, the BLM will be notified immediately by the operator. The BLM will assess the situation and work with the operator on corrective actions to resolve the problem.

Abandonment Cementing:
Upon well abandonment in high cave karst areas additional plugging conditions of approval may be required. The BLM will assess the situation and work with the operator to ensure proper plugging of the wellbore.

Pressure Testing:
Annual pressure monitoring will be performed by the operator on all casing annuli and reported in a sundry notice. If the test results indicated a casing failure has occurred, remedial action will be undertaken to correct the problem to the BLM's approval.

Timing Limitation Stipulation / Condition of Approval for lesser prairie-chicken: Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1 through June 15 annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, pipeline, road, power line, 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 feet from the source of the noise.

Attention: The proposed action occurs within the WIPP Lesser Prairie-Chicken Habitat Evaluation Area (HEA) as described in the 2008 Special Status Species Resource Management Plan Amendment. Therefore, according to the prescriptions set forth in the RMPA for management of HEAs, non-emergency exceptions to the Timing Limitation Condition-of-Approval will not be granted to afford the species protection during its breeding season.

Ground-level Abandoned Well Marker to avoid raptor perching:
Upon the plugging and subsequent abandonment of the well, a well marker will be installed approximately 2 inches above ground level and contain the following information: operator name, lease name, and well number and location, including unit letter, section, township, and range. The previous listed information will be welded, stamped, or otherwise permanently engraved into the metal of the marker. For more installation details, contact the Carlsbad Field Office at 575-234-5972.

Plan of Development

Operator is to submit a Unit Plan of Development (UPOD) annually to the BLM. Guidelines for UPOD are available upon request at the BLM Carlsbad Field Office.

VI. CONSTRUCTION

A. NOTIFICATION

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

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

B. V-DOOR DIRECTION: East

C. TOPSOIL

The operator shall stockpile the topsoil in a low profile manner in order to prevent wind/water erosion of the topsoil. The topsoil to be stripped is approximately 6 inches in depth. The topsoil will be used for interim and final reclamation.

D. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

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

E. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call theCarlsbad Field Office at (575) 234-5972.

F. 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.

G. ON LEASE ACCESS ROADS

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

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

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

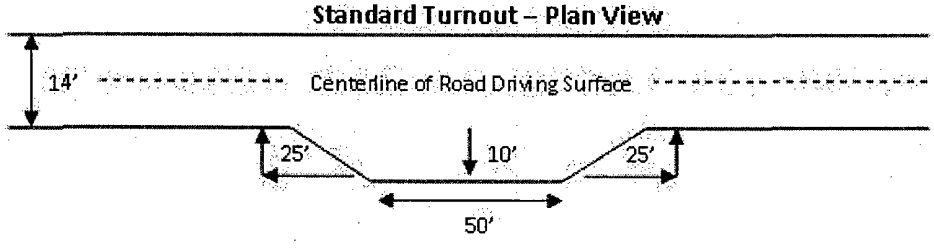
The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing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

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

Ditching

Ditching shall be required on both sides of the road.

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

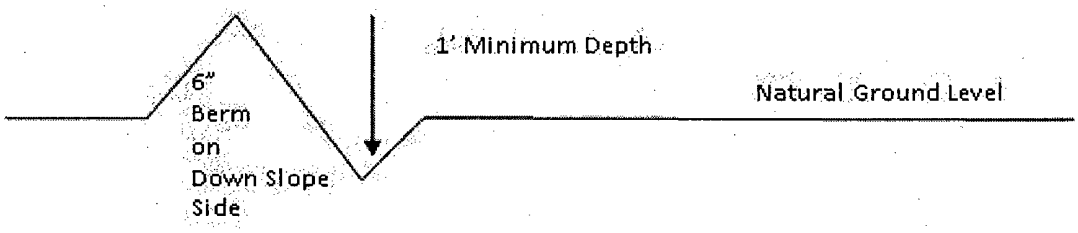


Drainage

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

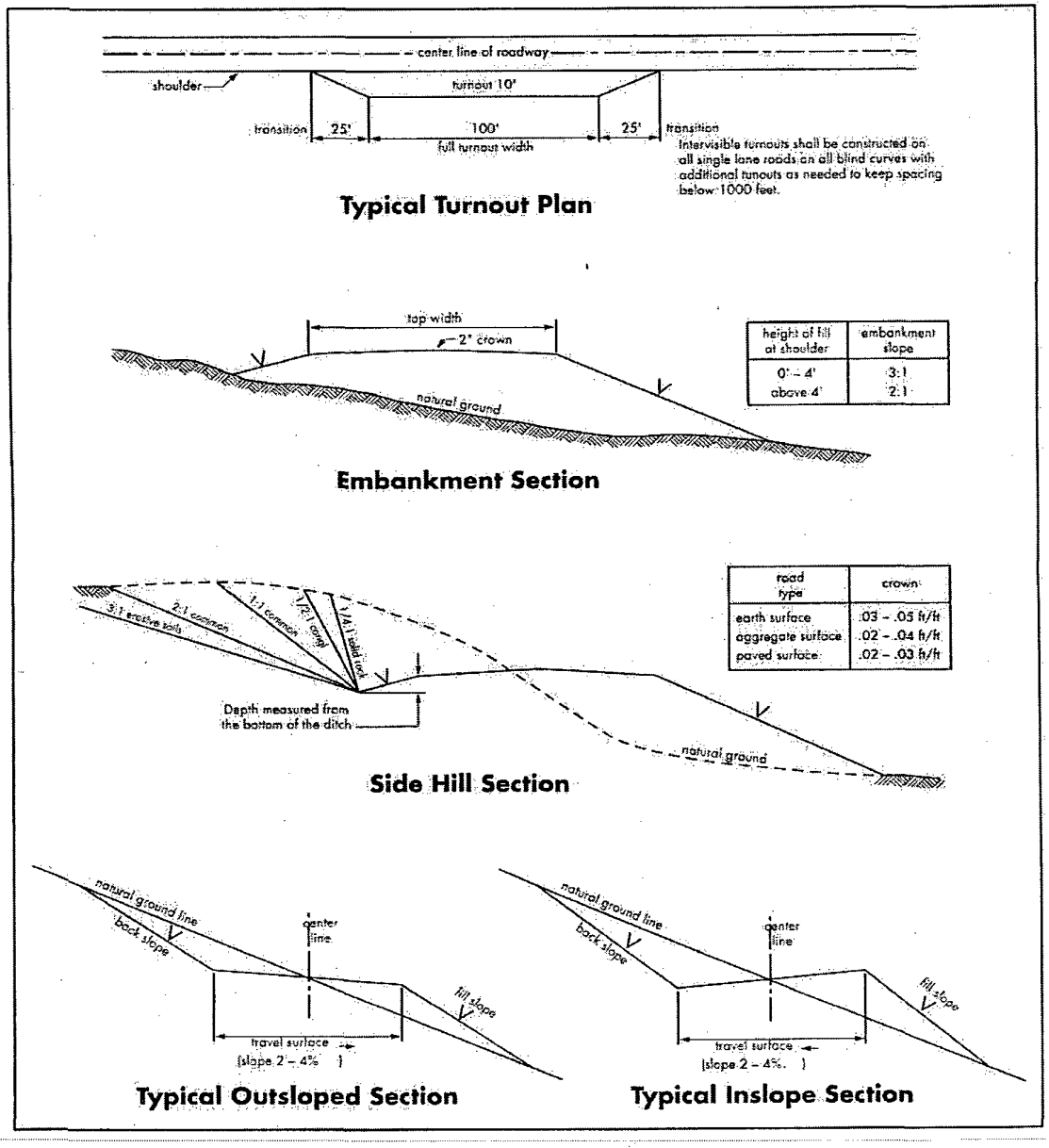
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

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. **Due to recent H2S encounters in the salt formation, it is recommended that monitoring equipment be onsite for potential Hydrogen Sulfide prior to drilling out the surface shoe. If Hydrogen Sulfide is encountered, please report measurements 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. **If the drilling rig is removed without approval – an Incident of Non-Compliance will be written and will be a "Major" violation.**

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. **The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) will be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.**

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 prior to drilling out 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. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. 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.

HIGH CAVE/KARST
Possible water and brine flows in the Salado and Castile formations.
Possible lost circulation within the Delaware and Bone Spring.
WIPP/R-111-P Potash

1. The **13-3/8** inch surface casing shall be set at **approximately 475 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt)** and cemented to the surface.

    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 surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

    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. **Casing to be set within the Lamar Limestone. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst and 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 **7** 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. Operator should have plans as to how they will achieve circulation on the next stage.

   b. Second stage above DV tool, cement shall:

   ☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office.

4. The minimum required fill of cement behind the **4-1/2** inch production liner is:

   ☒ Cement not required; packer system to be used. Minimum overlap – 100 feet.

5. 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.

6. 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. **5M tested as a 2M.**

   a. **For surface casing only:** If the BOP/BOPE is to be tested against casing, the wait on cement (WOC) time for that casing is to be met (see WOC statement at start of casing section). Independent service company required.

3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **9-5/8** inch intermediate casing shoe shall be **3000 (3M)** psi. **5M tested as a 3M.**

4. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

    a. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time.

    b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (18 hours) or potash (24 hours) prior to initiating the test.

    c. The results of the test shall be reported to the appropriate BLM office.

    d. 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.**

    e. 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.

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 within 330' of the WIPP Land Withdrawal Area boundary. As a result, BOPCO, L.P.is required to submit daily logs and deviation survey information to the Department of Energy per requirements of the Joint Powers Agreement. Information from this well will be included in the Quarterly Drilling Report. Information will also be provided to the New Mexico Oil Conservation Division after drilling activities have been completed. 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 Mr. Mel Balderrama at melvin.balderrama@wipp.ws or fax to his attention at 575-234-6062.

F. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

DHW 100610

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 grant 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 behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

C. ELECTRIC LINES –

STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES

A copy of the grant 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:
- Limit all disturbance to authorized width of approved access road.
- For reclamation remove poles, lines, transformer, etc. and dispose of properly.
- Fill in any holes from the poles removed.

IX. 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.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation 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 that is free of contaminants 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.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

X. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

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