Form 3160-5 (August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010

SUNDRY Do not use thi abandoned wel	5. Lease Seria NMLC06 6. If Indian, A			
SUBMIT IN TRI		7. If Unit or CA/Agreement, Name and/or No. BIG EDDY UNIT 682		
Type of Well	ner		8. Well Name BIG EDD	and No. Y UNIT DI2 1H
2. Name of Operator BOPCO, L.P.	9. APLWell N	015-41820		
3a. Address PO BOX 2760 MIDLAND, TX 79702		10. Field and Pool, or Exploratory WC WILLIAM SINK (BS)		
4. Location of Well (Footage, Sec., T Sec 34 T19S R31E NENE 660 32.622281 N Lat, 103.852000		r Parish, and State OUNTY, NM		
12. CHECK APPE	ROPRIATE BOX(ES) TO	INDICATE NATURE OF	NOTICE, REPORT, OR	OTHER DATA
TYPE OF SUBMISSION		ТҮРЕ С	OF ACTION	
Notice of Intent Subsequent Report Final Abandonment Notice 13. Describe Proposed or Completed Ope If the proposal is to deepen directiona Attach the Bond under which the wor following completion of the involved testing has been completed. Final Abdetermined that the site is ready for final BOPCO, L.P., respectfully required Eddy Unit DI2 #1H prior to correct Completed For Saw Hard Accepted for recognitions. Accepted for recognitions and the substitution of the control of the c	ally or recomplete horizontally, g k will be performed or provide the operations. If the operation resu	ive subsurface locations and measure Bond No. on file with BLM/BI lits in a multiple completion or relational after all requirements, including the construction on the location of time constraints.	sured and true vertical depths of IA. Required subsequent reports completion in a new interval, a F	Well Integrity Other Indicate the distribution of the control of
14. I hereby certify that the foregoing is Name(Printed/Typed) COURTNE	Electronic Submission #22 For BO	27366 verified by the BLM Work PCO, L.P., sent to the Carlst processing by JERRY BLAK	bad	RECEIVED NOV 2 1 2013
Signature (Electronic S	ubmission)	Date 11/20/	2013	NMOCD ARTESIA
	THIS SPACE FOR	R FEDERAL OR STATE	OPPICF 世等D O \ / [īn I
Approved By Conditions of approval, Many, are attached certify that the applicant holds legal or equivalent would entitle the applicant to conduct the applicant to conduct the applicant to conduct the same factorious or fraudulents.	1. Approval of this notice does a itable title to those rights in the sct operations thereon.	Title ot warrant or ubject lease Office	NOV 2 0 201	· · · · · · · · · · · · · · · · · · ·

Form 3160 -3 (March 2012)

BLM Carlsbad Field Office

OMB No. 1004-0137 Expires October 31, 2014

5. Lease Serial No.

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

MMLC0069705 (BHL) NM 02447 SI+ 6. If Indian, Allotee or Tribe Name APPLICATION FOR PERMIT TO DRILL OR REENTER see pg 1 of 8 pt drilling plan for lease 7 If Unit or CA Agreement, Name and No. **V** DRILL la. Type of work: REENTER Big Eddy Unit 68294X 8. Lease Name and Well No. ✓ Oil Well Gas Well Other lb. Type of Well: ✓ Single Zone Multiple Zone Big Eddy Unit DI2 #1H Name of Operator BOPCO, L.P. 9. APL Well No 3a. Address PO Box 2760 432-683-2277 WC William Sink (Bone Spring) 49 Midland, TX 79702 11. Sec., T. R. M. or Blk. and Survey or Are 4. Location of Well (Report location clearly and in accordance with any State requirements.*) At surface NENE, UL A, 600' FNL & 1255' FEL, Lat:32.622281, Long:103.852 Section 34, T19S-R31E At proposed prod. zone 350'FNL&2290'FEL Sec 33 T19S-R31E, Lat:32.623081, Lon:103.872556 12. County or Parish 13. State 14. Distance in miles and direction from nearest town or post office* **Eddy County** NM 26 miles northeast of Carlsbad, NM 16. No. of acres in lease 1920 Distance from proposed* 17. Spacing Unit dedicated to this well location to nearest property or lease line, ft. 561' from unit line (Also to nearest drig. unit line, if any) 200 to nearest well, drilling, completed, Big Eddy Unit DI2 #2H applied for, on this lease, ft. 19. Proposed Depth 20. BLM/BIA Bond No. on file 18. Distance from proposed location* COB 000050 9.140 TVD/14.728MD 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start* 23. Estimated duration 3466' 10/01/2013 35 days 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form: 1. Well plat certified by a registered surveyor. 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). 2. A Drilling Plan. 3. A Surface Use Plan (if the location is on National Forest System Lands, the 5. Operator certification SUPO must be filed with the appropriate Forest Service Office). Such other site specific information and/or plans as may be required by the

25. Signature Mutthell Fockhart	Courtney Lockhart	08/30/2013
Title Regulatory Analyst		
Approved by (Signature)	Name (Printed/Typed)	Date
Title	Office	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 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.

(Continued on page 2)

RECEIVED NOV 21 2013 nmocd artesia

NOV **21** 2013 × ,----



DISTRICT I 1625 N. Prench Dr., Hobbs, NM 88240 DISTRICT II

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102 Revised July 16, 2010

Well Number

1H

Submit one copy to appropriate District Office

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

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV 1820 S. St. Francis Dr., Santa Fe, NM 87505

API Number

Property Code

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

Property Name

BIG EDDY UNIT DI 2

Pool Code

97650

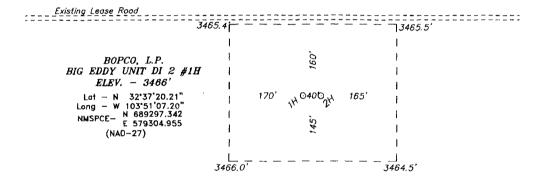
WELL LOCATION AND ACREAGE DEDICATION PLAT

Pool Name

WC WILLIAMS SINK (BONE SPRING)

ogrid no 260737		Operator Name						Elevation 3466'	
200/3/		Ĺ			BOPCO, L.			3460	D
		···			Surface Loc	ation			
UL or lot No.	Section	Township		Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	34	19 5	31 E		660	NORTH	1255	EAST	EDDY
			Bottom	Hole Loc	cation If Diffe	erent From Sur	face		
UL or lot No.	Section	Township	1 - 1	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
В	33	19 S	6 31 E		350	NORTH	2290	EAST	EDDY
Dedicated Acres	Joint of	r Infill	Consolidation (Code Or	đer No.				
200									
NO ALLO	WABLE W							EN CONSOLIDA	ATED
		OR A	NON-STAN	DARD UN	IIT HAS BEEN	APPROVED BY	THE DIVISION		
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 OPERATOR CERTIFICATION I haveby certify that the information contained herein is true and complete to the best of my knowledge and being, and that information the series of the series of my knowledge and being, and that information information in the series of my knowledge and being, and that information in									
					· · · · · · · · · · · · · · · · · · ·		BA	sin surveyS	29135

SECTION 34, TOWNSHIP 19 SOUTH, RANGE 31 EAST, N.M.P.M., WELL PAD LAYOUT NEW MEXICO. EDDY COUNTY,



200 0 200 400 FEET SCALE: 1" = 200'

Directions to Location:

FROM THE JUNCTION OF LUSK AND SHUGART, GO WEST ON SHUGART FOR 2.8 MILES TO LEASE ROAD, ON LEASE ROAD GO SOUTH 0.5 MILES TO PROPOSED LEASE ROAD.

BOPCO,

BIG EDDY UNIT DI 2 #1H / WELL PAD TOPO

THE BIG EDDY UNIT DI 2 #1H LOCATED 660'

FROM THE NORTH LINE AND 1255' FROM THE EAST LINE OF SECTION 34, TOWNSHIP 19 SOUTH, RANGE 31 EAST,

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

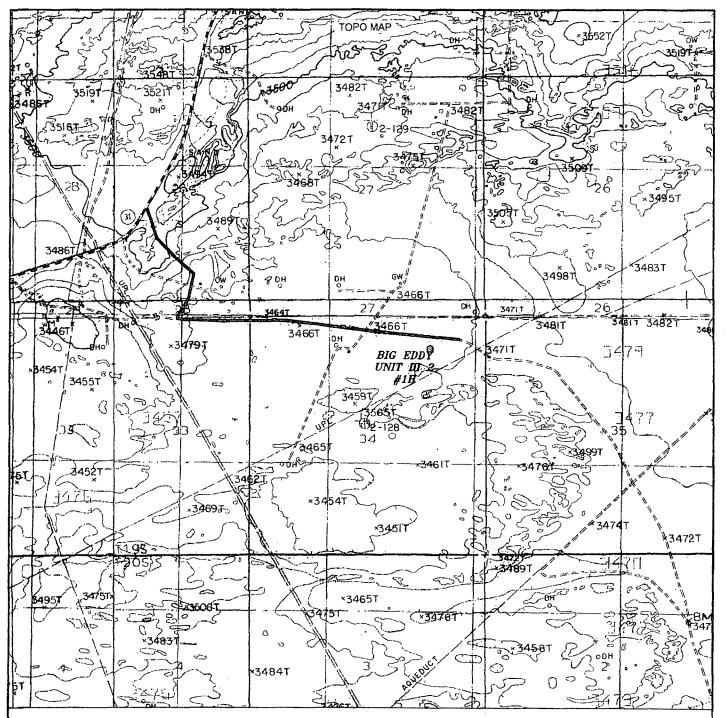
BASIN SURVEYS P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 29135

Drawn By: K. GOAD

08-16-2013 Disk: KJG - 29135WELL Survey Date: 08-13-2013 Sheet 1

of Sheets





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

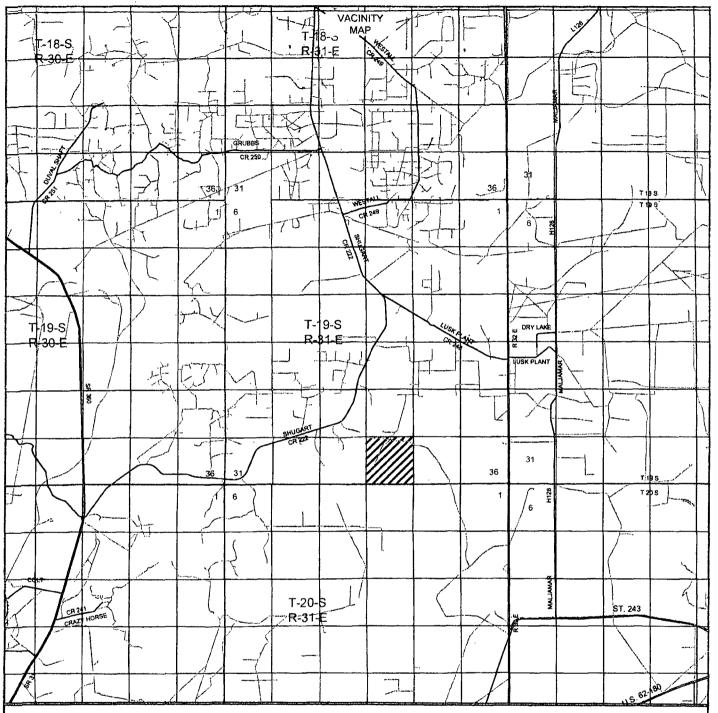
W.O. Number:	KJG - 29135
Survey Date:	08-13-2013
Scale: 1" = 2	000,
Date: 08-16-	-2013

BOPCO, L.P.

of

Sheets

Sheet



Date: 08-16-2013



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

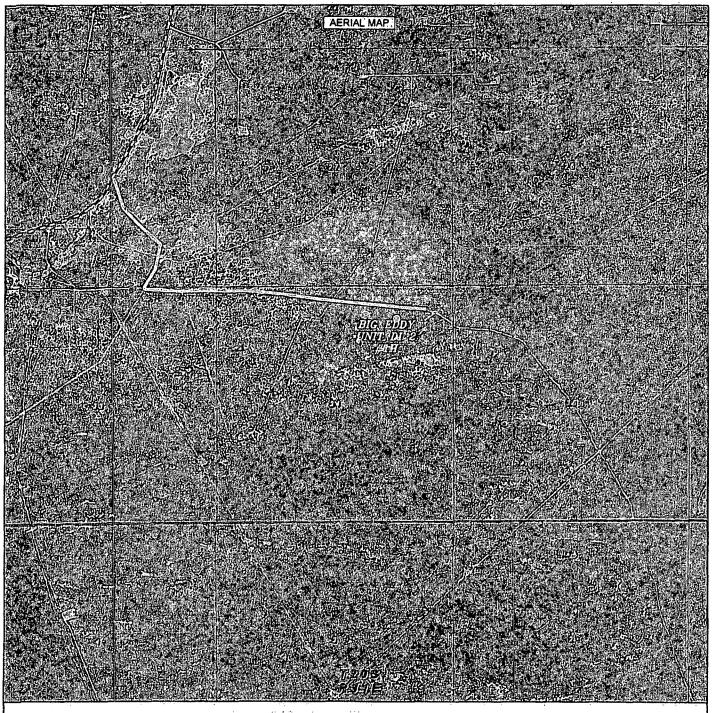
(575) 392-2206 - Fax basinsurveys.com W.O. Number: KJG - 29135

Survey Date: 08-13-2013

Scale: 1" = 2 Miles

BOPCO, L.P.

Sheet 3 of 6 Sheets





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: KJG – 29135

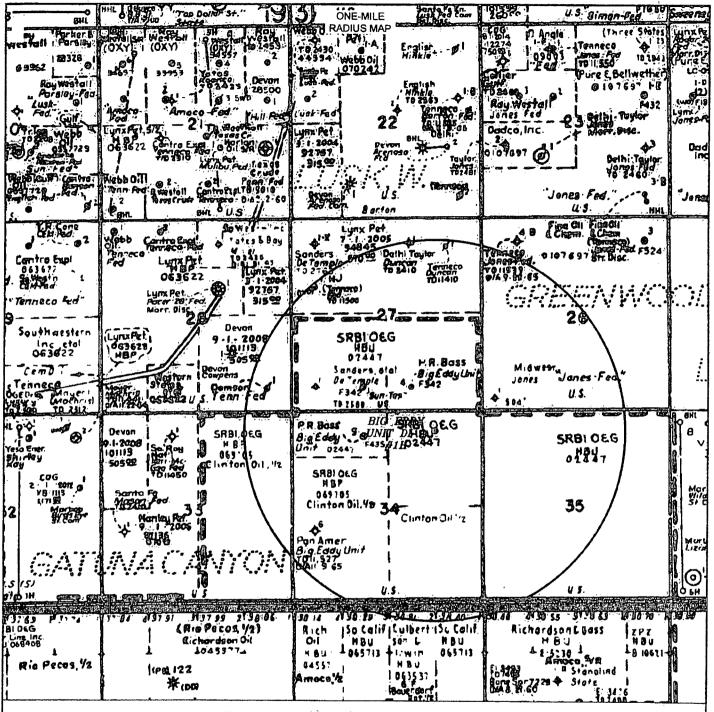
Scale: 1" = 2000'

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



BOPCO, L.P.

Sheet 4 of 6 Sheets



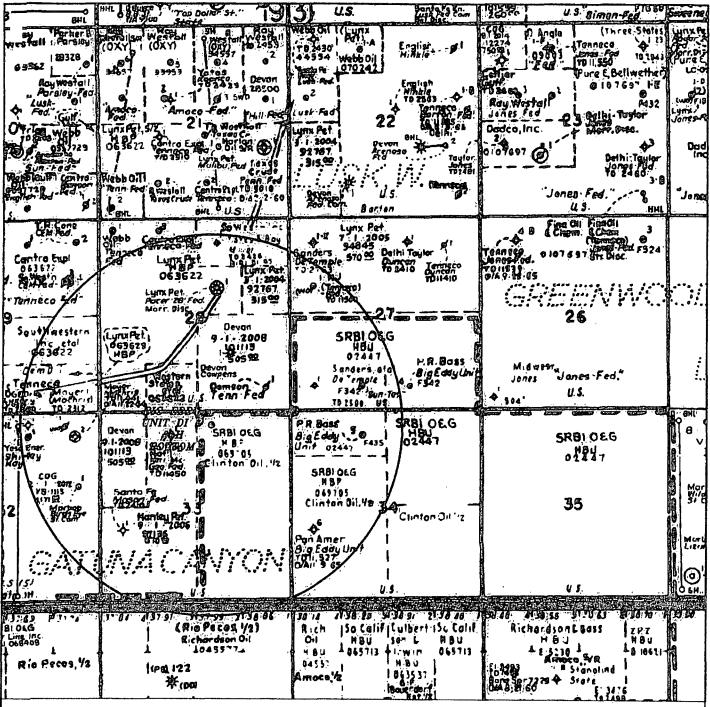


P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (575) 393—7316 — Office (575) 392—2206 — Fax basinsurveys.com W.O. Number: KJG — 29135
Scale: None

VELLOW TINT

YELLOW TINT - USA LAND BLUE TINT - STATE LAND NATURAL COLOR - FEE LAND BOPCO, L.P.

Sheet 5 of 6 Sheets





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: KJG — 29135 Scale: None

YELLOW TINT — USA LAND BLUE TINT — STATE LAND NATURAL COLOR — FEE LAND BOPCO, L.P.

____6

MULTI-POINT SURFACE USE PLAN

NAME OF WELL: BIG EDDY UNIT DI 2 #1H

LEGAL DESCRIPTION - SURFACE: 660' FNL, 1255' FEL, Section 34, T19S, R31E, Eddy County, NM

BHL: 350' FSL, 2290' FEL, Section 33, T19S, R31E, Eddy County, New Mexico.

POINT 1: EXISTING ROADS

A) Proposed Well Site Location:

See Form C-102 (Survey Plat).

B) Existing Roads:

From the junction of Lusk and Shugart, go west on Shugart for 2.8 miles to lease road. On lease road go south 0.5 miles to proposed lease road.

C) Existing Road Maintenance or Improvement Plan:

Existing roads will be maintained and kept in the same or better condition than before operations began. See the Well Pad Layout and Topo Map of the survey plat (Sheet 1 and 2 of plat package).

POINT 2: NEW PLANNED ACCESS ROUTE

A) Route Location:

No new lease road will be built. (See the Well Pad Layout of the survey plat (Sheet 1 of plat package).

B) Width

14' 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

The following wells are located within a one-mile radius of the location site. See the One-Mile Radius Map (Sheet 5 of the plat package).

Existing wells	3 (Three)
Water wells	0 (Zero

POINT 4: LOCATION OF EXISTING OR PROPOSED FACILITIES

- A) The BEU Hackberry 34 Federal Battery is within one mile.
- B) New Facilities in the Event of Production:

New production facilities will be built at BEU Hackberry 34 Federal Battery. A new separator / treater will be set at BEU Hackberry 34 Federal Battery. A new flowline 2-7/8" or 3-1/2" in diameter is to be run above ground, approx. +/- 0.1 mile in length. The flowline is expected to carry oil, water, and gas. Power will be run to this location following existing lease roads. In the event that the power is not accessible or is insufficient, power will be supplied by a generator until adequate power can be supplied from the utility company.

C) Rehabilitation of Disturbed Areas Unnecessary for Production:

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 the Well Pad Layout and Aerial Map of the survey plat (Sheet 1 and 4 of plat package).

POINT 7: METHODS FOR HANDLING WASTE MATERIAL

A) Cuttings

Cuttings will be contained in the roll off bins and disposed at R360 Environmental Solutions located in Lea County, NM.

B) Drilling Fluids

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

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. Prior to cleanup operations, any hydrocarbon material in the reserve pit will be removed by skimming or burning as the situation would dictate.

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

The "Rig Layout Schematic" (Sheet 6 of plat package) shows the dimensions of the well pad, 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. The top soil will be stockpiled on the south side of the location.

B) Locations of Access Road

See the Well Pad Layout, Topo Map, and Vicinity Map of the survey plat (Sheet 1, 2, and 3 of plat package).

C) Lining of the Pits

No reserve pits - closed loop system.

POINT 10: PLANS FOR RESTORATION OF THE SURFACE

- A) Reserve Pit Cleanup Not applicable. Closed loop drilling fluid system will be used
- B) Restoration Plans Production Developed

BOPCO, L.P. has no plans for interim reclamation to allow for additional wells to be drilled on this pad

C) Restoration Plans - No Production Developed

BOPCO, L.P. has no plans for interim reclamation to allow for additional wells to be drilled on this pad

POINT 11: OTHER INFORMATION

A) On-Site

Location on-site conducted by Cecil Watkins-BOPCO L.P., Randy Amanda Lynch-BLM, and Robert Gomez-Basin Survey on 8/8/2013. The Big Eddy Unit DI 2 #1H was moved to a new surface footage call of 660' FNL & 1255' FEL of Sec 34-T19S-R31E in order to clear the Hackberry SWD. This well will be a dual pad with BEU DI 2 #2H. Location layout is as follows: v-door will face the west, frac tank pad will be on south/southeast corner, access road will enter location from the north side and topsoil will be stockpiled to the south side of location.

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

There are no water wells located within a 1 mile radius of the proposed location.

G) Residences and Buildings

None in the immediate vicinity.

H) Historical Sites

None observed.

Archeological Resources

No independent archeological survey has been done. This well location is located in the area covered by Memorandum of Agreement — Permian Basin. A Payment of \$1,507.00 fee for this project is included in this application. Any location or construction conflicts will be resolved before construction begins. Please see diagram 4 for flowline route.

J) Surface Ownership

The well site is on federally 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

No open pits will be used for drilling or production. Any open top tanks will be netted.

M) Terrain

Slightly rolling hills.

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
Gary Fletcher
3104 East Green Street
Carlsbad, New Mexico 88220
(575) 887-7329

F.D. "Fritz" Schoch Box 2760 Midland, Texas 79702 (432) 683-2277

OPERATOR'S CERTIFICATION

APPLICATION FOR PERMIT TO DRILL BIG EDDY UNIT DI 2 #1H 660' FNL, 1255' FEL, Sec. 34, T19S, R31E, Eddy County, NM

In reference to the above captioned well, I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in the APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this 30 th day of 10 10 13.

If you have any questions regarding the accuracy of the plan provided herein, please do not hesitate to contact me at (432) 683-2277.

Sincerely,

Regulatory Analyst

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:
LEASE NO.:
WELL NAME & NO.:
SURFACE HOLE FOOTAGE:
BOTTOM HOLE FOOTAGE
LOCATION:
COUNTY:
BOPCO, LP
LC069705

1H-BIG EDDY UNIT DI
660' FNL & 1255' FEL
350' FNL & 2290' FEL (Sec. 33)
Section 34, T. 19 S., R 31 E., NMPM
Eddy County, New Mexico

TABLE OF CONTENTS

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

General Provisions
Permit Expiration
Archaeology, Paleontology, and Historical Sites
Noxious Weeds
Special Requirements
Lesser Prairie-Chicken Timing Stipulations
Ground-level Abandoned Well Marker
Commercial Well Determination
Unit Well Sign Specs
☐ Construction
Notification
Topsoil
Closed Loop System
Federal Mineral Material Pits
Well Pads
Roads
Road Section Diagram
Production (Post Drilling)
Well Structures & Facilities
Pipelines
☐ Interim Reclamation
Final Abandonment & Reclamation

I. GENERAL PROVISIONS

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

II. PERMIT EXPIRATION

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

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

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

IV. NOXIOUS WEEDS

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

V. SPECIAL REQUIREMENT(S)

Timing Limitation Stipulation / Condition of Approval for lesser prairie-chicken:

Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, 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 feet from the source of the noise.

<u>Ground-level Abandoned Well Marker to avoid raptor perching</u>: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well. For more installation details, contact the Carlsbad Field Office at 575-234-5972.

Commercial Well Determination

A commercial well determination shall be submitted after production has been established for at least six months.

Unit Wells

The well sign for a unit well shall include the unit number in addition to the surface and bottom hole lease numbers. This also applies to participating area numbers. If a participating area has not been established, the operator can use the general unit designation, but will replace the unit number with the participating area number when the sign is replaced.

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) 234-5909 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 strip the top portion of the soil (root zone) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. The root zone is typically six (6) inches in depth. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

Other subsoil (below six inches) stockpiles must be completely segregated from the topsoil stockpile. Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area for interim and final reclamation.

C. CLOSED LOOP SYSTEM

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

Payment shall be made to the BLM prior to removal of any federal mineral materials. 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. EXCLOSURE FENCING (CELLARS & PITS)

Exclosure Fencing

The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the pit is free of fluids and the operator initiates backfilling. (For examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

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 twenty-five (25) 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

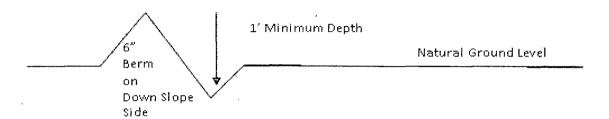
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

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 culverts shall be installed at deep waterway channel flow crossings through the road.

Cattleguards

An appropriately sized cattleguard sufficient to carry out the project shall be installed and maintained at fence/road crossings.

Any existing cattleguards on the access road route 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 cattleguards that are in place and are utilized during lease operations.

Fence Requirement

Where entry is granted 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 fences.

Public Access

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

Construction Steps

- 1. Salvage topsoil
- 3. Redistribute topsoil 4. Revegetate slopes 2. Construct road
- center line of roadway shoulder turnout 10' transition 100 transition full turnout width Intervisible turnouts shall be constructed on all single lane roads on all blind curves with additional tunouts as needed to keep spacing below 1000 feet. **Typical Turnout Plan** crown natural ground **Level Ground Section** road crown type .03 ~ .05 f**t/f**t earth surface aggregate surface .02 - .04 ft/ft paved surface .02 - .03 ft/ft Depth measured from the bottom of the ditch **Side Hill Section** center center line travel surface -> travel surface 🗻 (slope 2 - 4%) **Typical Outsloped Section Typical Inslope Section**

Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

VII. 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.

Exclosure Netting (Open-top Tanks)

Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

Chemical and Fuel Secondary Containment and Exclosure Screening

The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1½ inches.

Open-Vent Exhaust Stack Exclosures

The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone.) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

Containment Structures

Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the

largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

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** from the BLM Standard Environmental Color Chart (CC-001: June 2008).

B. PIPELINES

STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

A copy of the application (Grant, Sundry Notice, 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 20 feet. If the pipeline route follows an existing road or buried pipeline right-of-way, the surface pipeline must be installed no farther than 10 feet from the edge of the road or buried pipeline right-of-way. If existing surface pipelines prevent this distance, the proposed surface pipeline must be installed immediately adjacent to the outer surface pipeline. All construction and maintenance activity will be confined to existing roads or right-of-ways.
- 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 <u>24</u> 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.

- 16. 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, powerline 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.
- 17. Surface pipelines must be less than or equal to 4 inches and a working pressure below 125 psi.

18. Special Stipulations:

a. <u>Lesser Prairie-Chicken</u>: Oil and gas activities 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 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. Normal vehicle use on existing roads will not be restricted.

C. ELECTRIC LINES (Not Applied for in APD)

VIII. INTERIM RECLAMATION

Since it is expected that multiple wells will be drilled from this location in the future, no interim reclamation will be required. However, during the life of the development, all disturbed areas not needed for future wells or active support of production operations should undergo 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).

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well.

Seed Mixture 2, for Sandy 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 <u>no</u> 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	l <u>b/acre</u>
Sand dropseed (Sporobolus cryptandrus)	1.0
Sand love grass (Eragrostis trichodes)	1.0
Plains bristlegrass (Setaria macrostachya)	2.0

^{*}Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed