ATS-09-5210 Form 3160-3 RECEIVED OCD-HOBBS FORM APPROVED (April 2004) NOA J Ö SONB OMB No. 1004-0137 Expires March 31, 2007 UNITED STATES HOBBS OUTPARTMENT OF THE INTERIOR Lease Serial No. NM-120908 BUREAU OF LAND MANAGEMENT If Indian, Allotee or Tribe Name APPLICATION FOR PERMIT TO DRILL OR REENTER REENTER 7 If Unit or CA Agreement, Name and No. DRILL la. Type of work: 8. Lease Name and Well No. <37 lb. Type of Well: X Oil Well Gas Well X | Single Zone Multiple Zone PADUCA "30" FEDERAL # 1 Name of Operator 9. API Well No. OGX RESOURCES, LLC Jeff Birkelbach 432-685-1287) 30-025-26234 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory P. O. BOX 2064 MIDLAND, TEXAS 79702 432-685-1287 WILDCAT-WOLFCAMP 4. Location of Well (Report location clearly and in accordance with any State requirements.*) 11. Sec., T. R. M. or Blk. and Survey or Area T24S-R32E Unit G At surface 1980' FNL & 1980' FEL SECTION 30 SECTION 30 T24S-R32E At proposed prod. zone 330' FSL & 1980' FEL SECTION 30 T24S-R32E 1 14. Distance in miles and direction from nearest town or post office* 12. County or Parish 13. State Approximately 30 miles West of Jal New Mexico LEA CO. NM 15. Distance from proposed* 16. No. of acres in lease 17. Spacing Unit-dedicated to this welllocation to nearest property or lease line, ft. 1980' 1840 120 / (Also to nearest drig, unit line, if any) 18. Distance from proposed location* 19. Proposed Depth MD-14,427 20. BLM/BIA Bond No. on file to nearest well, drilling, completed, applied for, on this lease, ft. 1320' TVD-11,650' NMB-000244 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start* 23. Estimated duration 35401 WHEN APPROVED 36 Days 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form: 1. Well plat certified by a registered surveyor. 4. Bond to cover the operations unless covered by an existing bond on file (se 2. A Drilling Plan. Item 20 above). 3. A Surface Use Plan (if the location is on National Forest System Lands, the 5. Operator certification SUPO shall be filed with the appropriate Forest Service Office). Such other site specific information and/or plans as may be required by the authorized officer. 25. Signature Name (Printed/Typed) Joe T. Janica 08/06/09 Title

Permit Eng.

Approved by (Signature)

/s/ Don Peterson

Name (Printed/Typed)

NOV -5 2009

Title

Office

CARLSBAD FIELD 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. APPROVAL FOR TWO YEARS

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.

*(Instructions on page 2)

Carlsbad Controlled Water Basin

EE ATTACHED FOR ONDITIONS OF APPROVAL

్ గాలాక్ష్మాహ్హా స్ట్రాంగా ముందుకుండి.

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

RECEIVED

State of New Mexico

DISTRICT I DISTRICT 1
1625 N. FRENCH DR., HOBBS, NM 882NOV 10 2009

Energy, Minerals and Natural Resources Department

Form C-102

Revised October 12, 2005 Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

HOBBSOCDIL CONSERVATION DIVISION 1301 W. GRAND AVENUE, ARTESIA.

1220 SOUTH ST. FRANCIS DR. Santa Fe, New Mexico 87505

DISTRICT IV

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

1220 S. ST. FRANCIS DR., SANTA FR. NM 8750	MELL LOCATION AND	ACREAGE DEDICATION PLAT	☐ AMENDED REPORT
API Number 30-025-26234	Pool Code	Pool Name WILDCAT-WOLFCAMP	, ,
Property Code 37986		operty Name "30" FEDERAL	Well Number
OGRID No. 217955	-	erator Name RESOURCES	Elevation 3540'

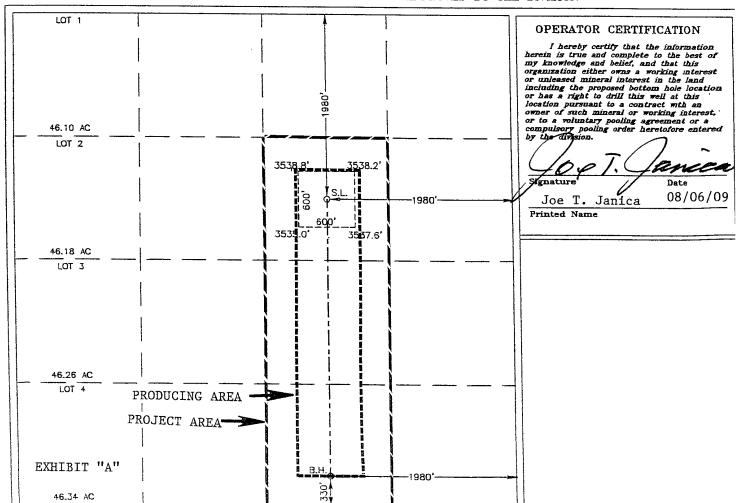
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	30	24 - S	32-E		1980	NORTH	1980	EAST	LEA

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
0	30	24-S	32-E		330	SOUTH	1980	EAST	LEA
Dedicated Acres	Joint o	r Infili Co	nsolidation	Code Or	der No.			·	
120	İ								

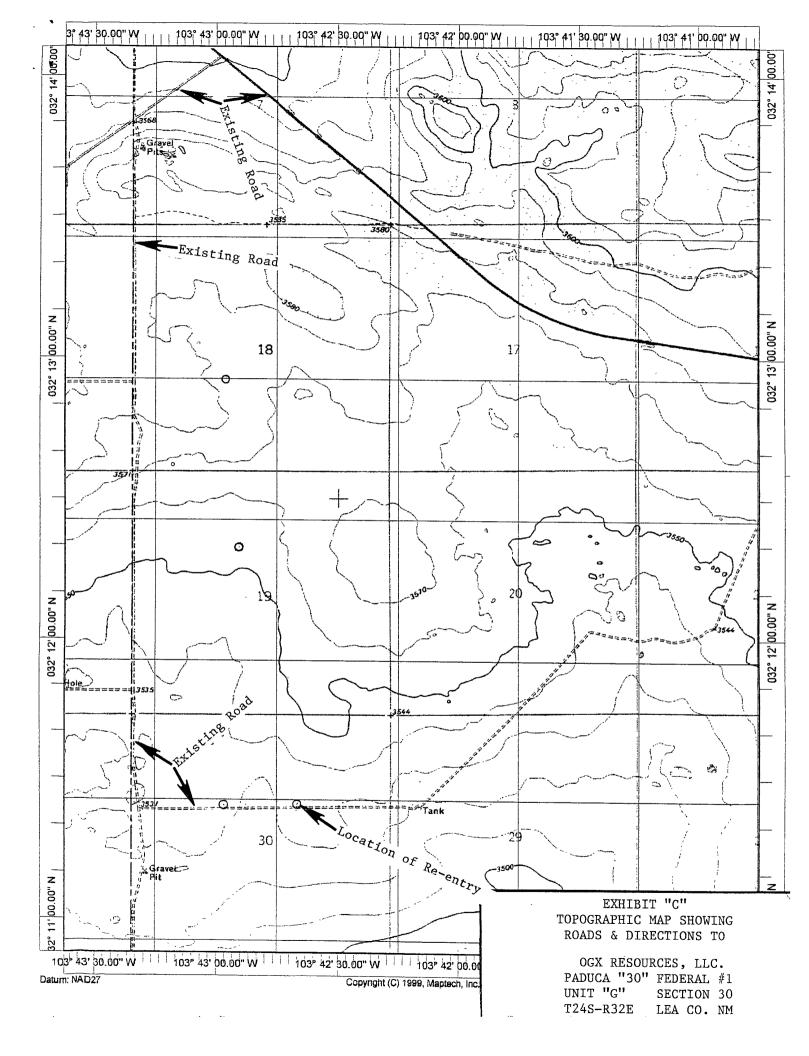
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

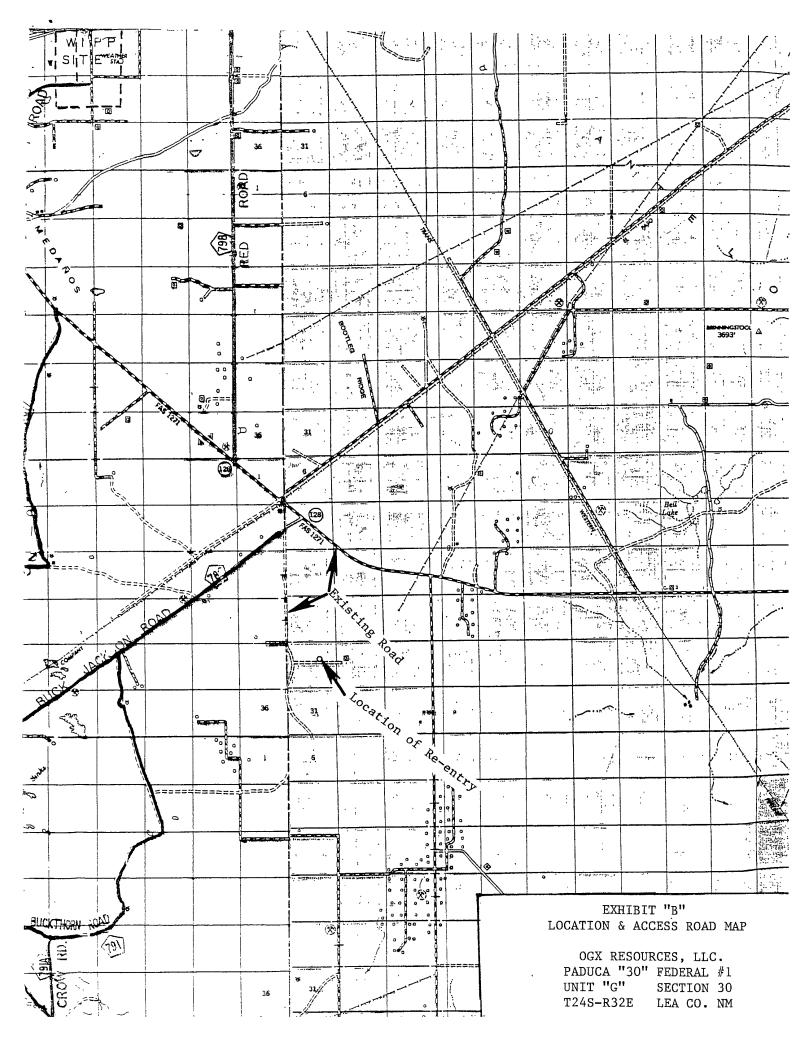


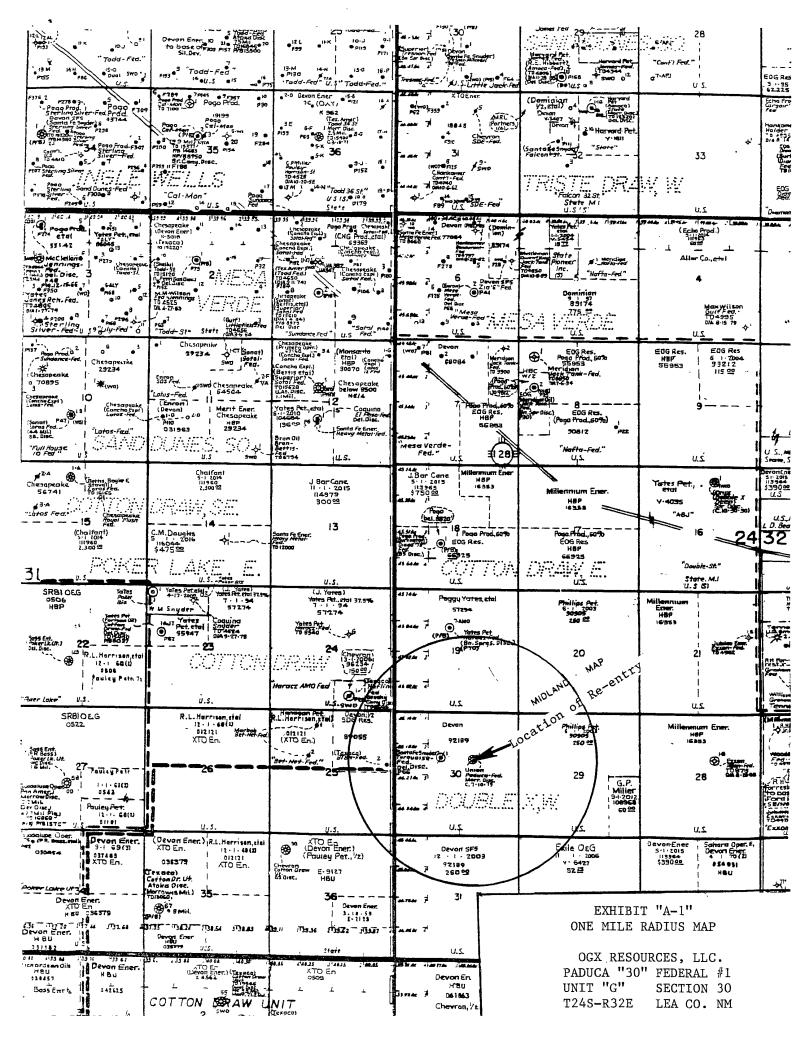
MEN TO A COMMISSION OF A WELL LUCATION AND ACREAGE DEDICATION PLA

distances make the from the outer houndaries of the Sect of Union Cil Co. of California Paduca Federal 24 South 32 East Lea G 1980 1980 3536.7 Wildcat . Outline the a reage dedicated to the subject well by colored pencil or bachure laws of the 2. If note than one lease is dedicated to the well, outline each and identify the contents of the first to work our interest and restitue to if house that one wase of different ownership is dedicated to the well, have the interest of the constraints of stated by the exact to attend unity ration for e-proling et If answer is "ves" type of consolidation If answer is the first the owners and tract descriptions which have actually been this form Cheressary a commutie as the analyzed: the well until all interests have been consolidated for effecting or otherwise for until a non-standard unit, eliminating surfcointeres so Drilling Supt. Union Oil Co. of California January 26, 1979 January 24,1979 676

42.40







OGX Resources - Reentry Procedure Paduca Fed No. 1 Lea County, New Mexico July 2009

General Information

Lease:

Paduca

API No.: 30-025-26234

Well No .:

Fed1 Wildcat

Casing: Sur:

13 3/8" 48# H40 10 3/4" 51.5#

Field: County:. State:

Lea **New Mexico** 1st Int: 2nd Int:

7" 5/8" 29.7# \$95

Section: Township: 30 **24S** 32E

Range:

Section Ties:

1980' FNL & 1980' FEL

Ground Level:

3535

Objectives

The primary objective of this reentry is to tie the 7 5/8" casing back to surface & cement the 7 5/8" x 10 3/2" annulas to surface.

Attachments

Wellbore schematics

Procedure

- 1) Dig out & reinstall wellhead.
- 2) MI&RU 600 series PU. Rack 12,750'+ 3 1/2" DP. Install BOP. Set frac tanks for storage water w/ fresh & brine.
- 3) RIH-Drill w/ 9 5/8" bit + bit sub + DC's to top of 7 5/8" stub @ 4700'. POH w/ bit.
- 4) RIH-Drill w/ 6 3/4" bit + bit sub + DC's to top of Lnr @ 12,622'. POH w/ bit.
- RIH w/ mill & dress off 7 5/8" stub looking up.
- 5) RIH w/ mill & dress off 7 5/8" stub looking up. W, II Per 1. Cray Squeeze
 6) PU a Bowen 7 5/8" lead bowl w/ cement-ports & run 7 5/8" 29.7# S95 casing to surface. RU service company & cement w/ approx 500 sx "C" + additives. Fig. 1.34 par operator CRW 10/14/69.
- RIH w/ 6 3/2" bit & scrapper to PBTD. Test casing to 7500psi. POH
- 8) RU wireline & Run GR/CCL/CNL from TD back to 4500'. PU & run gyro. RD wireline.
- Set cased hole oriented whipstock at +/- 11,200.
- 10) Cut window in casing w/ 9# brine. Leave 3 1/2" swinging. RD PU.
- 11) RU drilling rig & stand back 3 ½" DP. PU curve building BHA & land approx. 11,650' TVD.
- 12) Drill out lateral w/ 6 1/8" hole per plan.
- 13) Run 4 1/2" 13# P110 from total MD back to +/- 10,500' (centralize the curve only) on liner hanger. Cement w/ 20% volume above fluid caliper.
- RD Drilling rig. Move in completion tools.

APPLICATION TO RE-ENTER

OGX RESOURCES; LLC.
PADUCA "30" FEDERAL #1
UNIT "G" SECTION 30
T24S-R32E LEA CO. NM

In responce to questions asked under Section II of Bulletin NTL-6, the following information on the above well will be provider.

- 1. LOCATION: 1980' FNL & 1980' FEL SECTION 30 T24S-R32E LEA CO. NM
- 2. ELEVATION ABOVE SEA LEVEL: 3535' GI
- 3. GEOLOGICAL NAME OF SURFACE FORMATION: Quaternery Aeolian Deposits;
- 4. DRILLING TOOLS AND ASSOCIATED EQUIPMENT: Conventional rotary drilling rig using drilling mud as a circulating medium for the removal of solidsfrom the hole.
- 5. PROPOSED DRILLING DEPTH: MD-14,427' TVD-11,650'

6. ESTIMATED TOPS OF GEOLOGICAL FORMATIONS:

Lamar Lime 4595'
Bone Spring 8526'
Wolfcamp 11,606'

7. POSSIBLE MINERAL BEARING FORMATIONS:

Bone Spring Oil
Wolfcamp Oil

8. CASING PROGRAM:

				*	,	'. ,	41.4
HOLE SIZE	INTERVAL	CASING OD	WEIGHT	THREAD	COLLAR_	GRADE	CONDITION
	ORIGINAL	CASING SETT	ING DEPTH	WEIGHT	& SIZE		
17½"	0-719'	13 3/8"	48#	8-R	ST&C	H-40	New
12¼"	0-4600	10 3/4"	51.5# 45.5#	BUTT	BT&C	К55	New
9½"	0-12,834	7 5/8"	29.7#	8-R	LT&C	S-95 P-110	New
	5622-15531 LI		13#	8-R	LT&C	P-110	New
Safety De	sign Factors:				;		
Collapse	1.125 Bu	irst 1.0	Joint Str	ength l	.8 Bod	y Yield	1.5

APPLICATION TO RE-ENTER

OGX RESOURCES, LLC.
PADUCA "30" FEDERAL #1
UNIT "G". SECTION 30
T24S-R32E LEA CO. NM

9: CASING CEMENTING & SETTING DEPT

13 3/8" Surface	Ran and set 719' of 13 3/8" 48# H-40 ST&C casing. Cemented with 350 Sx. of cement and circulated cement to surface.
10 3/4" Intermedi	Late Ran 4600' of 10 3/4" 51.5# & 45.5# K-55 LT&C & BT&C casing. Cemented with 1800 Sx. of cement and circulated cement to surface.
7 5/8" 2nd Intermediate	Ran 12,834' of 7 5/8" 29.7# S-95 & P-110 LT&C casing. Cemented in two stages. 1st stage 825 Sx. 2nd stage (DV Tool at 7918') cemented with 1000 Sx. Temperature survey indicated top of cement 4400'.
4½" Production Liner	Will cut window in 7 $5/8$ " casing for KO point at 11,200±' drill lateral with 6 $1/8$ " bit to 14,427±' MD. Run 3930±' of $4\frac{1}{2}$ " 13.5# P-110 LT&C casing. Cement with 440 Sx (or 20% excess of Caliper measurement) to top of liner. Cement Yield 1.25

10. PRESSURE CONTROL EQUIPMENT: Exhibit "E" shows a 1500 Series 5000 PSI working pressure B.O.P. consisting of an annular bag type preventor, middle blind rams, and bottom pipe rams. The B.O.P. will be nippled up on the 13 3/8" casing and tested to API specifications. The B.O.P. will be operated at least once in each 24 hour period and the blind rams will be operated when the drill pipe is out of the hole on trips. Full opening stabbing valve and upper kelly cock will be utilized. Exhibit "E-1" shows a hydraulically operated closing unit and a 3" 5000 PSI working pressure choke manifold with dual adjustable chokes. No abnormal pressure or temperatures are expected while drilling this well.

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE MUD SYSTEM	
	DRI	LL OUT CEMENT	PLUGS WITH FRES	H WATER.	
11,200*-11	,650' 10.0	29–34	NC	Drill hole to EOC with brine water use high viscosity sweeps as required to clean hole.	
11,650–14,		29–34	10 cc or less	Brine water and Polymer as needed to control WL and high viscosity sweeps clean hole.	:

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, or unexpected kicks. In order to run DST's, open hole logs, and casing the viscosity and/or the water loss may have to be adjusted to meet these needs.

APPLICATION TO RE-ENTER

OGX RESOURCES, LLC.
PADUCA "30" FEDERAL #1
UNIT "G" SECTION 30
T24S-R32E LEA CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

- A. Run Gamma Ray, CNL, & CCL from TD (12,622') back to 4500'.
- B. Run Gyro in order to orient whipstock.

13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. There is no known presence of $\mathrm{H}^2\mathrm{S}$ in this area. If $\mathrm{H}^2\mathrm{S}$ is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP __5500 __PSI, and Estimated BHT 180°

14. ANTICIPATED STARTING DATE AND DURATION OF OPERATION:

Repair road as soon as approval is obtained. Well Service Rig will move in and rig up with related equipment. Clean out of old hole and drilling of new hole will take an estimated time of $28 \pm \mathrm{days}$. Running of liner and completion will take an estimated time of $30 \mathrm{days}$. The construction facilities will take an an estimated time of $15\pm \mathrm{days}$.

OGX Resources LLC

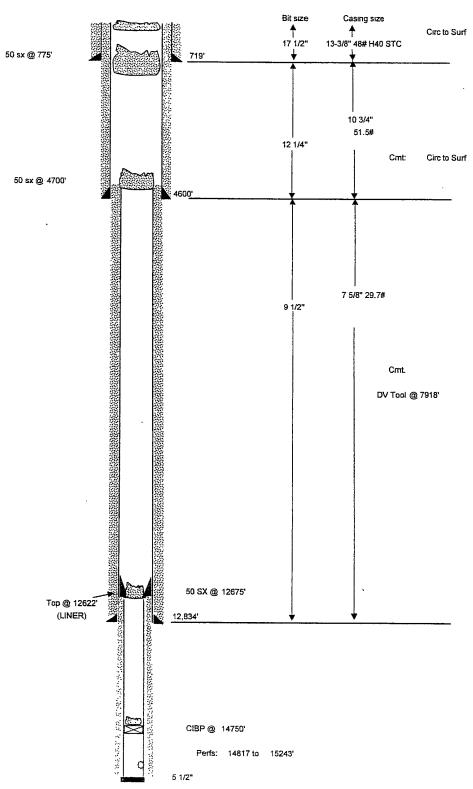
PADUCA FED No.1

sur:1980'FNL & 1980'FEL bhl: 330' FSL & 1980'FEL Sec. 30, T24S, R32E Lea County New Mexico

CURRENT WELLBORE

Spud 02/27/79

API: 30-025-26234



OGX Resources LLC

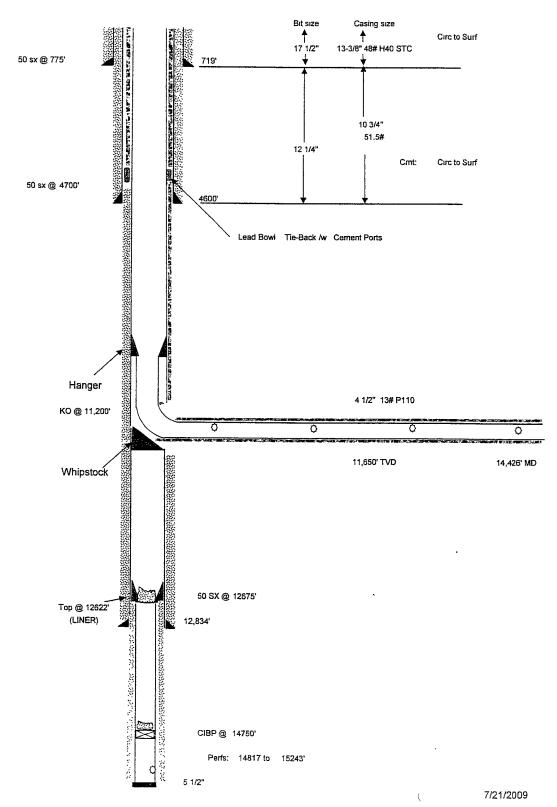
PADUCA FED No.1

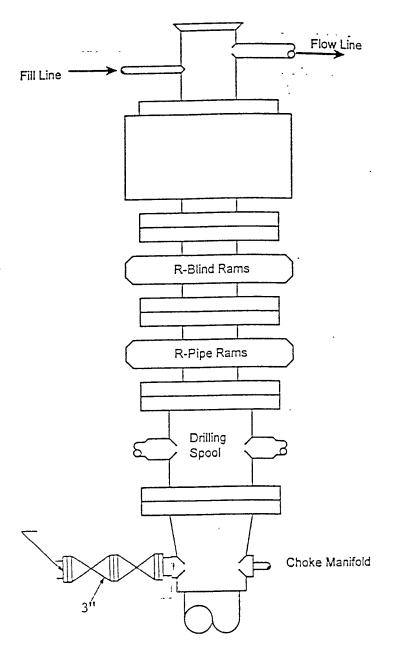
sur:1980'FNL & 1980'FEL bhl: 330' FSL & 1980'FEL Sec. 30, T24S, R32E Lea County New Mexico

PROPOSED WELLBORE

Spud 02/27/79

API: 30-025-26234





Type 1500 SERIES 5000 psi WP

EXHIBIT "E"
SKETCH OF B.O.P. TO BE USED ON

OGX RESOURCES, LLC.
PADUCA "30" FEDERAL #1
UNIT "G" SECTION 30
T24S-R32E LEA CO. NM

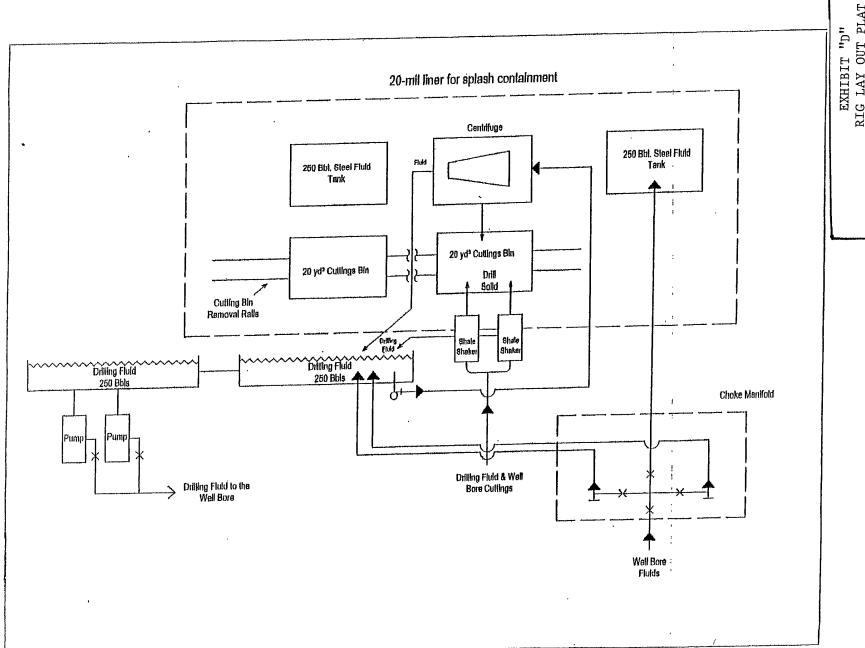


EXHIBIT "D" RIG LAY OUT PLAT

OGX RESOURCES, LLC.
PADUCA "30" FEDERAL #1
UNIT "G" SECTION 30
T24S-R32E LEA CO. NM

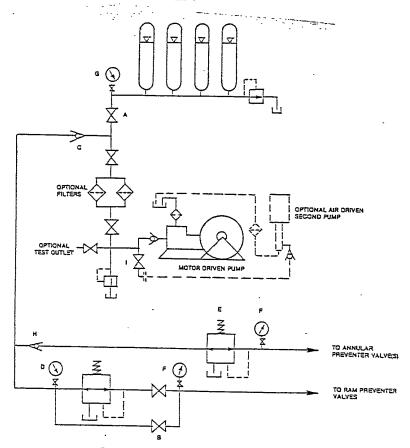


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

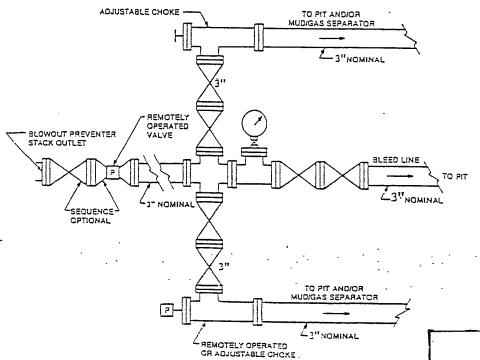


FIGURE K4-2. Typical choke manifold assembly for SM rated working pressure service — surface installation.

EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

: 3

OGX RESOURCES, LLC.
PADUCA "30" FEDERAL #1
UNIT "G" SECTION 30
T24S-R32E LEA CO. NM

HYDROGEN SULFIDE CONTINGENCY PLAN FOR DRILLING/WORKOVER/FACILITY

This well and its anticipated facility are not expected to have Hydrogen Sulfide releases. However, there may be Hydrogen Sulfide production in the nearby area. There are no Private residences in the area but a contingency plan has been orchestrated. OGX RESOURCES, LLC. Will have a company representative available to rig personnel throughout drilling or production operations. If Hydrogen Sulfide is detected or suspected, monitoring equipment will be acquired for monitoring and/or testing.

HYDROGEN SULFIDE CONTINGENCY PLAN FOR DRILLING/WORKOVER/FACILITY

General H2S Emergency Actions:

- 1. All personnel will immediately evacuate to an up-wind and if possible up-hill "safe area".
- 2. If for any reason a person must enter the hazardous area, they must wear a SCBA (Self Contained Breathing Apparatus).
- 3. Always use the "buddy system"
- 4. Isolate the well/problem if possible
- 5. Account for all personnel
- 6. Display the proper colors warning all unsuspecting personnel of the danger at hand.
- 7. Contact the Company personnel as soon as possible if not at the location (use the enclosed call list as instructed)

At this point the company representative will evaluate the situation and coordinate the necessary duties to bring the situation under control, and if necessary, the notification of the emergency response agencies and nearby residents.

EMERGENCY PROCEDURES FOR AN UNCONTROLLABLE RELEASE OF H2S

- 1. All personnel will don the self contained breathing apparatus
- 2. Remove all personnel to the "safe area" (always use the buddy system)
- 3. Contact company personnel if not on location]
- 4. Set in motion the steps to protect and or remove the general public to and upwind "safe area" Maintain strict security & safety procedures while dealing with the source.
- 5. No entry to any unauthorized personnel
- 6. Notify the appropriate agencies: City Police City Street(s)

State Police - State Rd.
County Sheriff - County Rd.

7. Call the NMOCD

HYDROGEN SULFIDE CONTINGENCY PLAN FOR DRILLING/WORKOVER/FACILITY

If at this time the supervising person determines the release of H2S cannot be contained to the site location and the general public is in harms way he will take the necessary steps to protect the workers and the public.

EMERGENCY CALL LIST: (Start and continue until ONE of these people has been contacted)

	OFFICE	MOBILE	HOME
Jeff Birkelbach	432-685-1287	432-694-7880	432-553-0391
Donny Leek		432-634-4862	432-399-4489
JW Drilling Co	575-748-8704	575-513-2415 575-513-0321	i govi
State Police	Eddy County	·	749.0510
State Police	Lea County		575 -748-9718 575 -392-5588
Sheriff Sheriff	Eddy County Lea County		575-746-2701
Emergency Medical Service (Ambulance)	Eddy County Lea County	Eunice	911 or 575-746-2701 911 or 575-394-3258
Emergency Response	Eddy County SEI Lea County	RC	575-476-9620
Artesia Police Dept Artesia Fire Dept	-		575 746-500 1 575 746-500 1
Carisbad Police Dept Carisbad Fire Dept		/	575- 88 5-2111 575 88 5-3125

575--885-3125

HYDROGEN SULFIDE CONTINGENCY PLAN FOR DRILLING/WORKOVER/FACILITY

EMERGENCY CALL LIST (CONT.)

Loco Hills Police Dept		E7E (77 22.40
Tot Deltas D		575 677-2349
Jal Police Dept Jal Fire Dept		575395-2501
Jal Ambulance		575395-2221
		575395-2221
Eunice Police Dept		E7E 204 0440
Eunice Fire Dept		575- 394-0112
Eunice Ambulance		575 394-325 8 575 394-325 8
Hohten II n		373394-3238
Hobbs Police Dept Hobbs Fire Dept		575397-3365
110003 THE Dept		575397-9308
NMOCD	District 1 Ct D	
	District 1 (Lea, Roosevelt, Curry) District 2 (Eddy, Chavez)	575 393-6161
	,	575 748- 12 8 3
Lea County Information		ETE 202 9000
C-11		575—393-8203
Callaway Safety	Eddy/Lea Counties	575392-2973
BJ Services	A	
Sati 1003	Artesia Hobbs	575746-3140
	HOUUS	575 392-5556
Halliburton	Artesia	1 000 700 0 100
	Hobbs	1-800-523-2482
Will I William		1-800-523-2482
Wild Well Control	Midland	432-550-6202
	Mobile	432-553-1166

HYDROGEN SULFIDE CONTINGENCY PLAN FOR DRILLING/WORKOVER/FACILITY

PROTECTION OF THE GENERAL PUBLIC (ROE)

- 100 ppm at any public area (any place not associated with this site)
- 500 ppm at any public road (any road with the general public may travel)
- 100 ppm radius of ¼ mile in New Mexico will be assumed if there is insufficient data to
 do the calculations, and there is a reasonable expectation that H2S could be present in
 concentrations greater than 100 ppm in the gas mixture

CALCULATIONS FOR THE 100 PPM (ROE) "PASOUILL-GIFFORD EQUATION"

X = [(1.589) (mole fraction) (Q-volume in std cu ft)] to the power of (0.6258)

CALCULATION FOR THE 500 PPM ROE:

X = [(.4546) (mole fraction) (Q - volume in std cu ft)] to the power of (0.6258)

Example:

If a well/facility has been determined to have 150 / 500 ppm H2S in the gas mixture and the well/facility is producing at a gas rate of 100 MCFPD then:

150 ppm X = [(1.589) (.00015) (100,000 cfd)] to the power of (.6258) X = 7 ft.

500 ppm X = [(.4546) (.0005) (100,000 cfd)] to the power of (.6258) X = 3.3 ft.

(These calculations will be forwarded to the appropriate District NMOCD office when Applicable)

PUBLIC EVACUATION PLAN:

- Notification of the emergency response agencies of the hazardous condition and implement evacuation procedures.
- A trained person in H2S safety shall monitor with detection equipment the H2S concentration, wind and area exposure (ROE). This person will determine the outer perimeter of the hazardous area. The extent of the evacuation area will be determined from the data being collected. Monitoring shall continue until the situation has been resolved. (All monitoring equipment shall be UL approved, for use in class 1 groups A, B, C & D, Division 1, hazardous locations. All monitor will have a minimum capability of measuring H2S, oxygen and flammable values.)

HYDROGEN SULFIDE CONTINGENCY PLAN FOR DRILLING/WORKOVER/FACILITY

- Law enforcement shall be notified to set up necessary barriers and maintain such for the duration of the situation as well as aid in the evacuation procedure.
- The company supervising personnel shall stay in communication with all agencies through out the duration of the situation and inform such agencies when the situation has been contained and the effected area(s) is safe to enter.

PROCEDURE FOR IGNITING AN UNCONTROLABLE CONDITION:

- 1. Human life and/or property are in danger.
- 2. There is no hope of bringing the situation under control with the prevailing conditions at the site.

INSTRUCTION FOR IGNITION:

- Two people are required. They must be equipped with positive pressure, self contained breathing apparatus and a "D" ring style full body, OSHA approved safety harness. Non flammable rope will be attached.
- One of the people will be qualified safety person who will test the atmosphere for H2S, oxygen and LFL. The other person will be the company supervisor; he is responsible for igniting the well.
- Ignite up wind from a distance no closer than necessary. Make sure that where you ignite
 from has the maximum escape avenue available. A 25 mm flare gun shall be used, with a
 ± 500 ft. range to ignite the gas.
- 4. Prior to ignition, make a final check with combustible gases.
- 5. Following ignition, continue with the emergency actions & procedures as before.

HYDROGEN SULFIDE CONTINGENCY PLAN FOR DRILLING/WORKOVER/FACILITY

REQUIRED EMERGENCY EQUIPMENT:

1. Breathing apparatus:

- Rescue packs (SCBA) 1 unit shall be placed at each breathing area, 2 shall be stored in the safety trailer.
- Work/Escape packs 4 packs shall be stored on the rig floor with sufficient air hose not to restrict work activity
- <u>Emergency Escape Packs</u> 4 packs shall be stored in the doghouse for emergency evacuation.

2. Signage & Flagging:

- One color code condition sign will be placed at the entrance to the site reflection the
 possible conditions at the site.
- A colored conditioned flag will be on display, reflecting the condition at the site at the time.

3. Briefing Area:

Two perpendicular areas will be designated by signs and readily accessible.

4. Wind Socks:

Two windsocks will be placed in strategic locations, visible from all angles.

5. H2S Detectors & Alarms:

- The stationary detector with three sensors will be placed in the upper dog house if
 equipped, set to visually alarm @ 10 ppm and audible at 14 ppm. Calibrate a
 minimum of every 30 days or as needed. The sensors will be placed in the following
 places: (Gas sample tubes will be stored in the safety trailer)
 - Rig Floor
 - Bell Nipple
 - End of flow line or where well bore fluid are being discharged.

6. Auxiliary Rescue Equipment:

- Stretcher
- Two OSHA full body harness
- 100 ft. 5/8 inch OSHA approved rope.
- 1 − 20# class ABC fire extinguisher
- Communication via cell phones on location and vehicles on location.

HYDROGEN SULFIDE CONTINGENCY PLAN FOR DRILLING/WORKOVER/FACILITY

USING SELF CONTAINED BREATHING AIR EQUIPMENT (SCBA):

- (SCBA) SHOULD BE WORN WHEN ANY OF THE FOLLOWING ARE PERFORMED:
 - Working near the top or on the top of a tank
 - Disconnecting any line where H2S can reasonably be expected
 - Sampling air in the area to determine if toxic concentration of H2S can exist.
 - Working in areas where over 10 ppm on H2S has been detected.
 - At any time there is a doubt as the level of H2S in the area.
- All personnel shall be trained in the use of SCBA prior to working in a potentially hazardous location.
- Facial hair and standard eyeglasses are not allowed with SCBA.
- Contact lenses are never allowed with SCBA.
- Air quality shall be continuously checked during the entire operation.
- After each use, the SCBA unit shall be cleaned, disinfected, serviced and inspected.
- All SCBA shall be inspected monthly.

RESCUE AND FIRST AID FOR VICTIMS OF HYDROGEN SULFIDE (H2S) POISONING:

- Do not panic
- Remain calm and think
- Get on the breathing apparatus

HYDROGEN SULFIDE CONTINGENCY PLAN FOR DRILLING/WORKOVER/FACILITY

- Remove the victim to the safe breathing area as quickly as possible. Up wind and uphill
 from source or cross wind to achieve upwind.
- Notify emergency response personnel.
- Provide artificial respiration and or CPR, as necessary.
- Remove all contaminated clothing to avoid further exposure.
- A minimum of two personnel on location shall be trained in CPR and First Aid.

HYDROGEN SULFIDE CONTINGENCY PLAN FOR DRILLING/WORKOVER/FACILITY

H2S is extremely toxic. The acceptable ceiling for eight hours of exposure is 10 ppm, which is .001% by volume. H2S is approximately 20% heavier than air (Sp. Gr = 1.19) (Air = 1) and colorless. It forms an explosive mixture with air between 4.3% and 46%. By volume hydrogen sulfide is almost as toxic as hydrogen cyanide and is 5-6 times more toxic than carbon monoxide.

CHEMICAL ABBREV.	SPECIFIC GRVTY.	THRESHOLD LIMITS	HAZARDOUS LIMITS	LETHAL CONCENTRATIONS
H2S	1.19	10 ppm 15 ppm	100 ppm/hr	600ppm
HCN	0.94	10 ppm	150 ppm/hr	300 ppm
SO2	2.21	2 ppm	N/A.	1000 ppm
CL2	2,45	1 ppm	4 ppm/hr	1000 ppm
CO	0.97	50 ppm	400 ppm/hr	1000 ppm.
CO2	1.52	5000 ppm	5%	10%
CH4	0.55	90,000	Combustible @ 5%	N/A
	H2S HCN SO2 CL2 CO CO2	ABBREV. GRVTY. H2S 1.19 HCN 0.94 SO2 2.21 C1.2 2.45 CO 0.97 CO2 1.52	ABBREV. GRVTY. LIMITS H2S 1.19 10 ppm 15 ppm HCN 0.94 10 ppm SO2 2.21 2 ppm CL2 2.45 1 ppm CO 0.97 50 ppm CO2 1.52 5000 ppm	ABBREV. GRVTY. LIMITS HAZARDOUS LIMITS H2S 1.19 10 ppm 15 ppm 100 ppm/hr HCN 0.94 10 ppm 150 ppm/hr SO2 2.21 2 ppm N/A CL2 2.45 1 ppm 4 ppm/hr CO 0.97 50 ppm 400 ppm/hr CO2 1.52 5000 ppm 5%

Threshold Limit: Concentrations at which it is believed that all workers may be repeatedly

exposed, day after day without adverse effects.

Hazardous Limit: Concentrations that may cause death.

Concentrations: Concentrations that will cause death with short term exposure.

Threshold Limit: NIOSH guide to chemical hazards (10 ppm)

PHYSICAL EFFECTS OF HYDROGEN SULFIDE:

CONCENTRATION	PHYSICAL EFFECTS
.001% 10 ppm	
.005% 50 ppm	Obvious and unpleasant odor. Sate for 8 hr. exposure
.01% 100 ppm	Can cause some flu like symptoms and can cause pneumonia. Kills the sense of smell in 3-15 minutes. May irritate the eyes
.02% 200 ррт	And throat. Kills the sense of smell rapidly. Severely irritates the eyes and throat. Severe flu-like symptoms after 4 or more hours.
.05% 600 ppm	May cause lung damage and or death. Loss of consciousness quickly, death will result if not rescued promptly.

CERTIFICATION

I HEREBY CERTIFY THAT I OR PERSONS UNDER MY DIRECT SUPERVISION HAVE INSPECTED THE PROPOSED DRILL SITE AND THE ACCESS ROAD ROUTES, THAT I AM FAMILIAR WITH THE CONDITIONS THAT CURRENTLY EXIST, THAT THE STATEMENTS MADE IN THIS PLAN ARE TO THE BEST OF MY KNOWLEDGE ARE TRUE AND CORRECT, AND THAT THE WORK ASSOCIATED WITH THE OPERATIONS PROPOSED HEREIN WILL BE PERFORMED BY OGX RESOURCES, LLC. ITS CONTRACTORS AND/OR ITS SUB-CONTRACTORS AND IS IN CONFORMANCE WITH THIS PLANS AND TERMS AND THE CONDITIONS UNDER WHICH IT IS APPROVED. THIS STATEMENT IS SUBJECT TO THE PROVISIONS OF U.S.C. FOR FILING A FALSE REPORT.

OPERATOR'S REPRESENTATIVES:

BEFORE CONSTRUCTION

TIERRA EXPLORATION, INC P. O. BOX 2188 HOBBS, NEW MEXICO 88241 JOE JANICA 575-391-8503 CELL 575-390-1598 **DURING & AFTER CONSTRUCTION**

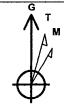
OGX RESOURCES, LLC.
P. O. BOX 2064
MIDLAND, TEXAS 79701
JEFF BIRKELBACH 432-685-1287
CELL 432-553-0391

NAME (Jos T. Jamin	•
TITLE	Permit Eng.	
DATE	08/06/09	



Project: Lea County Site: Paduca Federal

Well: #1H Wellbore: OH Plan: Plan #1 (#1H/OH)



Azimuths to Grid North True North: 0.82° Magnetic North: 9.52°

Magnetic Field Strength: 47826.8snT Dip Angle: 58.64° Date: 07/15/2009 Model: IGRF200510



Created By: Nate Bingham 'Date: 10.34, July 15 2009

Checked, ____ Date. ____

West(-)/East(+) (200 ft/in)

PROJECT DETAILS: Lea County
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level
Local North: Grid

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name TVD +N/-S +E/-W Northing Easting Shape PBHL(P#11650.00 -2970.00 0.00 -2970.000 0.000 Point

600	00								Ground Elevation:: 0.00 RKB Elevation: WELL @ 0.00ft (Original Well Elev) Rig Name: Original Well Elev																	
800	-		-	-4-	+++	+ +			10.0	V-S 00		+E/-W 0.00		No	rthing 0.000		Eas 0	ting .000	30° 59	Latitt 24.51		105° 5	Longiti 5' 44.137	de W	Slot	
000	-	1		· 1.			1																			
400		- }:		 11.							Sec 1		MD .00	Inc 0.00	Azi 0.00		SE(+N/-S	DETAILS +E/-1	N D	Leg 0.00	TFace 0.00	VSer 0.01	Targ	jet	
600				15-3		11.5	, (1, 1) , 1				3	11200 11906 14426	.00 .88	00.0 00.0e 00.0e	0.00 180.00	11200	00 00 -	0.00 450.00 970.00	0.0 0.0 0.0	0 1	0.00 2,73 0.00	0.00 180.00 0.00	0.00 450.00)	IL(P#1)	
800 000		1	-		<u></u>			Ĺ																		
000	*	<u>;</u> ;		٠,	; ·	1	;																			
200	1	4,				1	- -																			
400 300	-	्री व भूगुष																								
800-	;	:: 	1	g(4 1)	1 ,	3		· · ·	T .	1	,	1	1 1	. ()	ul t	Sleene	1 - 1	n:	i '3		10	· L !	.1 - 1			
100	-	KC	3.	'	OÔ'N	ID.0.0		C,0.00		112	0.007	1	 ,				1.15	la di	1. du. 1. du	545 145	1					
200	-	<u>-</u> -: ''',			· ·		÷	1						-					3 1	H.						
400 500	_	7	, ,	EDC	-119	06.86	MD,	00.00	INC,1		0°AZI,	11650.0	1. 3	THE S	DLS, 450	00 VS, -	50.001	N, O.OO'E			1,	1 (1) 1 (1)				
00			. :			-	. ;	11.			1 1	11. 4	L-144	. TF 3	VID,90,00	TNC,180	00° AZI		00'TVD,	2970.0	dvs,	2970.00	'N, 0.00'E	:		
000	1		, .		.;		."	21.3		٠,	. 1"	1 1	i pril	뿔숛			d i			提出	F-0	3 1 37	왕 교리			

Ì	-71			1.	, ,	. ,			137			11.	11111	111	41.41.44	to but	11.1		15,16	3 , 11,	1111
400		++	, ,;	.,		:	1	100 460		7 ,7	73.4	1	1 1 1 1 1					1111		1111	
200				4		١.	11	4	1	أمينان	4.5	1		温度	111	19 (P)	4,50	21 15.	1000	1. 1.	dil l
		4	Ġ,		VD .		00.00	ZI,112	0.00	.00°IN			KOP						3, 11,),), (1)
0		,	12		, , , ,	1	-		1. 1.	7, 1	8 G	121 11		11, 24			130	1	15.15.	112	
-200		,		, ئېن ى	لنبيل	4	,	4			1		11:11	Light Light	14.15 butto	14 (14 (14 (14 (14 (14 (14 (14 (14 (14 (1,1	11		17:4
		.14				.	. ; . ·	1) (11-)	,									11 17		in de Soud
-400	Ξ,	, ,	1.1	.1.	0.00'E	N, C	0.00°N		450,00	DLS,	D,12.7	0.00TV	Zi,1166	0.00°A	INC,18	,90.00	.86'MC	C-1190	EO	H.	। । । ।
-600		'. (-::	4	111	<u> </u>	4513.1	1-1-1	1110	11.3					1,441 1333	100	7 dg	1111	:, , ,
				. 1			1.1		16.1	1.11			Pals,	- iii		41, 4			14.1	JE.	1.
-800			,		1 ,	1		16	11	;	17.	ĒŢ.		1.	10.65	, et 4 f	211	JE. 7	1 1 14	4 40	.i.j.:.
-1000						+	1 1	'-			11-	+++		100			S 6	1 4 2	11.11	, , , , , , , , , , , , , , , , , , ,	
430		:				,	١,	4.1			١,		100					g.	la.	Http.	n _H
-1200							1 1		111	11,7	12.1			157	1,, 1,4	j.		1 10	July	剽	', i
-1400			:			+	i	ll.			-		ļ <u>`</u>	1131	1	143	7 7 1		1	5 1 77	11.11
-1600 -1600 -1800	- 1	41					133	"\;'			ļ.,	1.	13.14	1 1 r		3.5	, d (*) 			N.	
-1000			£				1, 15	77.	1.			, , , d , , , , , ,	- A 14	14	E gra	16.7	dia.	g [],	Sist		
-1800				30.		-+	124		777		11:	 	7 200 17 2 3 3 3	1 11 11 1	-				1931	<u> 1715</u>	d
2000		4141,			$-\gamma^{\frac{1}{2}}$		25 5				() i	-31				45.6	W.	4	2916.	-1166	1. 1
2000	,			,	-			٠,	1 1	7 7 1		Ħ,		35	1111	1,1	j. Pa		1	14.	, , ,
-2200	-,	احتبت				-		+ 12	-	12 7 17	41	187	1111	10,10	111	41.1		1111111	100 100	1,111	+++
-2400	.,	,	9								ή' . ·	1,34		. illi 1		F. ".	piani,	自身	[6] r	134ju	117 317
	1				η, p			ģ.		. S., ;		1.1	i det	11		3 4,		j: 1-j.			٠,
-2600		-, ,			7744			4 .		<u> </u>		1 1, 1		10 10 1		101 T		1 1			
-2800	- !			!	: ::	-		<u> 1.,</u>	,,,	, , , ,	1,1,	1			13.1						
	• 5	1. 1	' '				١,	'n.,	-4"			1, 1			1	ji ji			देखीः		1 1
-3000						+				 		****	7 14			7			1972	1111	
-3200		,			·		. r!	; ; -			311	1, 1		1100		700	10.1	11/11		1,11	- T.
1	,	0.00'E	0.00 N	S, -297	70.00	297	VD, 2	50.00	ZI, 116	80.00	o'INC,1	D,90.0	26.86 N		В					4,131, 441,	a-
-3400						1		1	7,7	156	1	1 1 1	111	14 3	' '+	117			++-	11.11	
3600						4		. ' ', '	,,	77	·	13,,	: ' -	لينبا	2,	11, 21	51 h t		-		, .
	- 13 14		. '		. '	4	٠. ١		,						1 1 1	싫다	1			44	
-3800						+	- 1	:			· · · · · ·	1171		120	- Jr. 1	12.5			, i - i - i	1 1	
4000				,	<u>.</u>	4		.		1		1. 1	14	14	: j.		' a. [, i, i,,	41	44
	'			٠,	ا ر		. ,								4° 7'4',	뭐		1 :			
-4200			,, , ,	-		+		-1	,					-, +	, 1			1, 1		444	5.1
£_4400	li_		-	le:		_[_	*	1 44	ا با	<u></u>	<u>'</u>				141,,,	They			1, 167	5 4	



OGX Resources

Lea County Paduca Federal #1H OH

Plan: Plan #1

Pathfinder X & Y Planning Report

15 July, 2009





Pathfinder X & Y Planning Report



Company: Project:

OGX Resources

Lea County

Site:

Paduca Federal

Well: Wellbore: #1H ОН Plan #1 Local Co-ordinate Reference: Well #1H

TVD Reference: MD Reference:

WELL @ 0.00ft (Original Well Elev) WELL @ 0.00ft (Original Well Elev)

But the said of the state of the state of the state of the said of

North Reference:

Survey Calculation Method: Database:

Minimum Curvature Midland Database

Design: Project

Map System:

US State Plane 1927 (Exact solution)

Geo Datum: Map Zone:

NAD 1927 (NADCON CONUS)

0.00 ft

New Mexico East 3001

System Datum:

Mean Sea Level

Paduca Federal

Site Position:

From:

None

Northing:

Easting: **Slot Radius:** Latitude:

Longitude:

Grid Convergence:

0.00 °

Well Position

Position Uncertainty:

+N/-S

0.00 ft

Northing:

0.000 ft

Latitude:

30° 59' 24.512 N

Position Uncertainty

+E/-W 0.00 ft 0.00 ft Easting: Wellhead Elevation:

8.70

0.000 ft

58.64

Longitude: **Ground Level:** 105° 55' 44.137 W

0.00 ft

IGRF200510

07/15/2009

Declination (°)

(°)

Field Strength

(nT) 47,827

Audit Notes:

Version:

Phase:

PLAN

Tie On Depth:

+E/-W

0.00

Depth From (TVD)

(ft)

0.00

+N-S (ft) 0.00

(ft) 0.00 Direction (°) 180.00

Survey Tool Program Date 07/15/2009

From

Survey (Wellbore)

Tool Name

Description

0.00 14,426.86 Plan #1 (OH) MWD

MWD - Standard



Pathfinder X & Y Planning Report



Company: OGX Resources

Project: Lea County
Site: Paduca Federal

Well: #1H

Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well #1H

TVD Reference: WELL @ 0.00ft (Original Well Elev)
MD Reference: WELL @ 0.00ft (Original Well Elev)

North Reference: Grid

Survey Calculation Method: Minimum Curvature Database: Midland Database

Planned Survey

MD	luc	Azi	TVD	TVDSS	N/S	EW	V. Sec	DLeg	Northing	Easting
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(ft)	(ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00



Pathfinder X & Y Planning Report



OGX Resources

Project: Site:

Lea County Paduca Federal

Well: #1H ОН

Wellbore:

Local Co-ordinate Reference: Well #1H

TVD Reference: WELL @ 0.00ft (Original Well Elev) MD Reference: WELL @ 0.00ft (Original Well Elev) North Reference:

· · Grid

Survey Calculation Method: Minimum Curvature

vvelibore: Design:	Plan #1						Survey Calcula Database:	tion Method:	Minimum Curvat Midland Databas		
Planned Sur	vey						The same of the same of the		A. T. Cristian Tolking		
MD (ft)	li (nc °)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
2,700		0.00	0.00	2,700.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800	0.00	0.00	0.00	2,800.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900	0.00	0.00	0.00	2,900.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000	0.00	0.00	0.00	3,000.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100	0.00	0.00	0.00	3,100.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200	0.00	0.00	0.00	3,200.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300	0.00	0.00	0.00	3,300.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400	0.00	0.00	0.00	3,400.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500	0.00	0.00	0.00	3,500.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600	0.00	0.00	0.00	3,600.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700	0.00	0.00	0.00	3,700.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800	0.00	0.00	0.00	3,800.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900	0.00	0.00	0.00	3,900.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000	0.00	0.00	0.00	4,000.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100	0.00	0.00	0.00	4,100.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200	0.00	0.00	0.00	4,200.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300	0.00	0.00	0.00	4,300.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400	0.00	0.00	0.00	4,400.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500	0.00	0.00	0.00	4,500.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600	0.00	0.00	0.00	4,600.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700	0.00	0.00	0.00	4,700.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800	0.00	0.00	0.00	4,800.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900	0.00	0.00	0.00	4,900.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000	.00	0.00	0.00	5,000.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100	.00	0.00	0.00	5,100.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00
5,200	.00	0.00	0.00	5,200.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300	.00	0.00	0.00	5,300.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00

Pathfinder X & Y Planning Report



OGX Resources Lea County

Project: Paduca Federal Site:

Well: #1H ОН Wellbore: Design: Plan #1 Local Co-ordinate Reference: Well #1H

TVD Reference: MD Reference: North Reference:

WELL @ 0.00ft (Original Well Elev) WELL @ 0.00ft (Original Well Elev)

Survey Calculation Method: Minimum Curvature Database: Midland Database

MD भूगा स्थापना स्थापना स्थापना स्थापना	Inc	Azi	TVD	TVDSS	N/S	E/W	V. Sec	DLeg	Northing	Easting
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(ft)	(ft)
5,400.00	0.00	0.00	5,400.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,500.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,600.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,800.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,900.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,100.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,200.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,300.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,400.00	6,400.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,600.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,700.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,800.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00
6,900.00	0.00	0.00	6,900.00	6,900.00	0.00	0.00	0.00	0.00	0.00	0.00
7,000.00	0.00	0.00	7,000.00	7,000.00	0.00	0.00	0.00	0.00	0.00	0.00
7,100.00	0.00	0.00	7,100.00	7,100.00	0.00	0.00	0.00	0.00	0.00	0.00
7,200.00	0.00	0.00	7,200.00	7,200.00	0.00	0.00	0.00	0.00	0.00	0.00
7,300.00	0.00	0.00	7,300.00	7,300.00	0.00	0.00	0.00	0.00	0.00	0.00
7,400.00	0.00	0.00	7,400.00	7,400.00	0.00	0.00	0.00	0.00	0.00	0.00
7,500.00	0.00	0.00	7,500.00	7,500.00	0.00	0.00	0.00	0.00	0.00	0.00
7,600.00	0.00	0.00	7,600.00	7,600.00	0.00	0.00	0.00	0.00	0.00	0.00
7,700.00	0.00	0.00	7,700.00	7,700.00	0.00	0.00	0.00	0.00	0.00	0.00
7,800.00	0.00	0.00	7,800.00	7,800.00	0.00	0.00	0.00	0.00	0.00	0.00
7,900.00	0.00	0.00	7,900.00	7,900.00	0.00	0.00	0.00	0.00	0.00	0.00
8,000.00	0.00	0.00	8,000.00	8,000.00	- 0.00	0.00	0.00	0.00	0.00	0.00



Pathfinder X & Y Planning Report



OGX Resources Company: Project: Lea County

Site: Paduca Federal

Well: #1H ОН Wellbore: Design: Plan #1 Local Co-ordinate Reference: Well#1H

TVD Reference: WELL @ 0.00ft (Original Well Elev) WELL @ 0.00ft (Original Well Elev) MD Reference:

North Reference:

Survey Calculation Method: Minimum Curvature Database: Midland Database

Planned Survey

Design.	rian #1		17.		湖 古名 自由 抗乳	Database:		Midland Databas	e .	
Planned Surve	Py									
MD (ft)	inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
8,100.	.00 0.00	0.00	8,100.00	8,100.00	0.00	0.00	0.00	0.00	0.00	0.00
8,200.	.00 0.00	0.00	8,200.00	8,200.00	0.00	0.00	0.00	0.00	0.00	0.00
8,300.	.00 0.00	0.00	8,300.00	8,300.00	0.00	0.00	0.00	0.00	0.00	0.00
8,400.	.00 0.00	0.00	8,400.00	8,400.00	0.00	0.00	0.00	0.00	0.00	0.00
8,500.	0.00	0.00	8,500.00	8,500.00	0.00	0.00	0.00	0.00	0.00	0.00
8,600.	00.00	0.00	8,600.00	8,600.00	0.00	0.00	0.00	0.00	0.00	0.00
8,700.	00.00	0.00	8,700.00	8,700.00	0.00	0.00	0.00	0.00	0.00	0.00
8,800.	0.00	0.00	8,800.00	8,800.00	0.00	0.00	0.00	0.00	0.00	0.00
8,900.	0.00	0.00	8,900.00	8,900.00	0.00	0.00	0.00	0.00	0.00	0.00
9,000.0	00.00	0.00	9,000.00	9,000.00	0.00	0.00	0.00	0.00	0.00	0.00
9,100.0	0.00	0.00	9,100.00	9,100.00	0.00	0.00	0.00	0.00	0.00	0.00
9,200.0	0.00	0.00	9,200.00	9,200.00	0.00	0.00	0.00	0.00	0.00	0.00
9,300.0	0.00	0.00	9,300.00	9,300.00	0.00	0.00	0.00	0.00	0.00	0.00
9,400.0	0.00	0.00	9,400.00	9,400.00	0.00	0.00	0.00	0.00	0.00	0.00
9,500.0	00.00	0.00	9,500.00	9,500.00	0.00	0.00	0.00	0.00	0.00	0.00
9,600.0	0.00	0.00	9,600.00	9,600.00	0.00	0.00	0.00	0.00	0.00	0.00
9,700.0	00.00	0.00	9,700.00	9,700.00	0.00	0.00	0.00	0.00	0.00	0.00
9,800.0	0.00	0.00	9,800.00	9,800.00	0.00	0.00	0.00	0.00	0.00	0.00
9,900.0	0.00	0.00	9,900.00	9,900.00	0.00	0.00	0.00	0.00	0.00	0.00
10,000.0	00.00	0.00	10,000.00	10,000.00	0.00	0.00	0.00	0.00	0.00	0.00
10,100.0	00.00	0.00	10,100.00	10,100.00	0.00	0.00	0.00	0.00	0.00	0.00
10,200.0	0.00	0.00	10,200.00	10,200.00	0.00	0.00	0.00	0.00	0.00	0.00
10,300.0	0.00	0.00	10,300.00	10,300.00	0.00	0.00	0.00	0.00	0.00	0.00
10,400.0	0.00	0.00	10,400.00	10,400.00	0.00	0.00	0.00	0.00	0.00	0.00
10,500.0		0.00	10,500.00	10,500.00	0.00	0.00	0.00	0.00	0.00	0.00
10,600.0		0.00	10,600.00	10,600.00	0.00	0.00	0.00	0.00	0.00	0.00
10,700.0	0.00	0.00	10,700.00	10,700.00	0.00	0.00	0.00	0.00	0.00	0.00



Pathfinder X & Y Planning Report



Company: Project:

OGX Resources

Lea County

Site:

Paduca Federal

Well: Wellbore: Design:

#1H ОН Plan #1 Local Co-ordinate Reference: Well #1H

Survey Calculation Method:

Database:

TVD Reference:

MD Reference: North Reference:

WELL @ 0.00ft (Original Well Elev) WELL @ 0.00ft (Original Well Elev)

Minimum Curvature Midland Database

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
10,800.00	0.00	0.00	10,800.00	10,800.00	0.00	0.00	0.00	0.00	0.00	0.0
10,900.00	0.00	0.00	10,900.00	10,900.00	0.00	0.00	0.00	0.00	0.00	0.0
11,000.00	0.00	0.00	11,000.00	11,000.00	0.00	0.00	0.00	0.00	0.00	0.0
11,100.00	0.00	0.00	11,100.00	11,100.00	0.00	0.00	0.00	0.00	0.00	0.0
11,200.00	0.00	0.00	11,200.00	11,200.00	0.00	0.00	0.00	0.00	0.00	0.0
	0.00,000,000,000			na in a said				SAME TO A	And for the state of some	Siki disiki
11,225.00	3.18	180.00	11,224.99	11,224.99	-0.69	0.00	0.69	12.73	-0.69	0.0
11,250.00	6.37	180.00	11,249.90	11,249.90	-2.77	0.00	2.77	12.73	-2.77	0.0
11,275.00	9.55	180.00	11,274.65	11,274.65	-6.24	0.00	6.24	12.73	-6.24	0.0
11,300.00	12.73	180.00	11,299.18	11,299.18	-11.07	0.00	11.07	12.73	-11.07	0.0
11,325.00	15.92	180.00	11,323.40	11,323.40	-17.25	0.00	17.25	12.73	-17.25	0.0
11,350.00	19.10	180.00	11,347.24	11,347.24	-24.77	0.00	24.77	12.73	-24.77	0.0
11,375.00	22.28	180.00	11,370.62	11,370.62	-33.60	0.00	33.60	12.73	-33.60	0.0
11,400.00	25.46	180.00	11,393.48	11,393.48	-43.72	0.00	43.72	12.73	-43.72	0.0
11,425.00	28.65	180.00	11,415.74	11,415.74	-55.09	0.00	55.09	12.73	-55.09	0.0
11,450.00	31.83	180.00	11,437.34	11,437.34	-67.68	0.00	67.68	12.73	-67.68	0.0
11,475.00	35.01	180.00	11,458.20	11,458.20	-81.45	0.00	81.45	12.73	-81.45	0.0
11,500.00	38.20	180.00	11,478.27	11,478.27	-96.35	0.00	96.35	12.73	-96.35	0.0
-11,525.00	41.38	180.00	11,497.47	11,497.47	-112.35	0.00	112.35	12.73	-112.35	0.0
11,550.00	44.56	180.00	11,515.76	11,515.76	-129.39	0.00	129.39	12.73	-129.39	0.0
11,575.00	47.75	180.00	11,533.08	11,533.08	-147.41	0.00	147,41	12.73	-147.41	0.0
11,600.00	50.93	180.00	11,549.37	11,549.37	-166.38	0.00	166.38	12.73	-166.38	0.0
11,625.00	54.11	180.00	11,564.58	11,564.58	-186.21	0.00	186.21	12.73	-186.21	0.0
11,650.00	57.30	180.00	11,578.66	11,578.66	-206.86	0.00	206.86	12.73	-206.86	0.0
11,675.00	60.48	180.00	11,591.58	11,591.58	-228.27	0.00	228.27	12.73	-228.27	0.0
11,700.00	63.66	180.00	11,603.29	11,603.29	-250.35	0.00	250.35	12.73	-250.35	0.0
11,725.00	66.85	180.00	11,613.75	11,613.75	-273.05	0.00	273.05	12.73	-273.05	0.0



Pathfinder X & Y Planning Report



Company: OGX Resources
Project: Lea County

Site: Paduca Federal Well: #1H

Well: #1H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well #1H

TVD Reference: WELL @ 0.00ft (Original Well Elev)
MD Reference: WELL @ 0.00ft (Original Well Elev)

North Reference: G

Survey Calculation Method: Minimum Curvature Database: Midland Database

Planned Survey

WD (tt)	inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
11,750.00	70.03	180.00	11,622.94	11,622.94	-296.30	0.00	296.30	12.73	-296.30	0.00
11,775.00	73.21	180.00	11,630.82	11,630.82	-320.02	0.00	320.02	12.73	-320.02	0.00
11,800.00	76.39	180.00	11,637.37	11,637.37	-344.14	0.00	344.14	12.73	-344.14	0.00
11,825.00	79.58	180.00	11,642.58	11,642.58	-368.59	0.00	368.59	12.73	-368.59	0.00
11,850.00	82.76	180.00	11,646.41	11,646.41	-393.29	0.00	393.29	12.73	-393.29	0.00
11,875.00	85.94	180.00	11,648.87	11,648.87	-418.17	0.00	418.17	12.73	-418.17	0.00
11,900.00	89.13	180.00	11,649.95	11,649.95	-443.14	0.00	443.14	12.73	-443.14	0.00
11,906.86	90.00	180.00	11,650.00	11,650.00	-4 50.00	0.00	450.00	12.73	-450.00	0.00
EOC-11906.86	'MD,90.00°INC,18	0.00°AZĮ,11650.0	0'TVD,12.73°DLS	, 450.00'VS, 450.0	00'N, 0.00'E	李·李·徐嘉/李65				1. 1. 2. 2. 1.
12,000.00	90.00	180.00	11,650.00	11,650.00	-543.14	0.00	543.14	0.00	-543.14	0.00
12,100.00	90.00	180.00	11,650.00	11,650.00	-643.14	0.00	643.14	0.00	-643.14	0.00
12,200.00	90.00	180.00	11,650.00	11,650.00	-743.14	0.00	743.14	0.00	-743.14	0.00
12,300.00	90.00	180.00	11,650.00	11,650.00	-843.14	0.00	843.14	0.00	-843.14	0.00
12,400.00	90.00	180.00	11,650.00	11,650.00	-943.14	0.00	943.14	0.00	-943.14	0.00
12,500.00	90.00	180.00	11,650.00	11,650.00	-1,043.14	0.00	1,043.14	0.00	-1,043.14	0.00
12,600.00	90.00	180.00	11,650.00	11,650.00	-1,143.14	0.00	1,143.14	0.00	-1,143.14	0.00
12,700.00	90.00	180.00	11,650.00	11,650.00	-1,243.14	0.00	1,243.14	0.00	-1,243.14	0.00
12,800.00	90.00	180.00	11,650.00	11,650.00	-1,343.14	0.00	1,343.14	0.00	-1,343.14	0.00
12,900.00	90.00	180.00	11,650.00	11,650.00	-1,443.14	0.00	1,443.14	0.00	-1,443.14	0.00
13,000.00	90.00	180.00	11,650.00	11,650.00	-1,543.14	0.00	1,543.14	0.00	-1,543.14	0.00
13,100.00	90.00	180.00	11,650.00	11,650.00	-1,643.14	0.00	1,643.14	0.00	-1,643.14	0.00
13,200.00	90.00	180.00	11,650.00	11,650.00	-1,743.14	0.00	1,743.14	0.00	-1,743.14	0.00
13,300.00	90.00	180.00	11,650.00	11,650.00	-1,843.14	0.00	1,843.14	0.00	-1,843.14	0.00
13,400.00	90.00	180.00	11,650.00	11,650.00	-1,943.14	0.00	1,943.14	0.00	-1,943.14	0.00
13,500.00	90.00	180.00	11,650.00	11,650.00	-2,043.14	0.00	2,043.14	0.00	-2,043.14	0.00
13,600.00	90.00	180.00	11,650.00	11,650.00	-2,143.14	0.00	2,143.14	0.00	-2,143.14	0.00
13,700.00	90.00	180.00	11,650.00	11,650.00	-2,243.14	0.00	2,243.14	0.00	-2,243.14	0.00



Site:

Pathfinder Energy Services

Pathfinder X & Y Planning Report



Company: OGX Resources Project:

Lea County Paduca Federal

Well: #1H Wellbore: ОН Plan #1 Design:

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Database:

Well#1H WELL @ 0.00ft (Original Well Elev) WELL @ 0.00ft (Original Well Elev)

Survey Calculation Method: Minimum Curvature Midland Database

Planned Survey

MD	Inc	Azi	TVD	TVDSS	N/S	EW	V. Sec	DLeg	Northing	Easting
(ft)	(*)	(°)	(ft)	(ft) `	(ft)	(ft)	(ft)	(°/100ft)	(ft)	(ft)
13,800.00	90.00	180.00	11,650.00	11,650.00	-2,343.14	0.00	2,343.14	0.00	-2,343.14	0.00
13,900.00	90.00	180.00	11,650.00	11,650.00	-2,443.14	0.00	2,443.14	0.00	-2,443.14	0.00
14,000.00	90.00	180.00	11,650.00	11,650.00	-2,543.14	0.00	2,543.14	0.00	-2,543.14	0.00
14,100.00	90.00	180.00	11,650.00	11,650.00	-2,643.14	0.00	2,643.14	0.00	-2,643.14	0.00
14,200.00	90.00	180.00	11,650.00	11,650.00	-2,743.14	0.00	2,743.14	0.00	-2,743.14	0.00
14,300.00	90.00	180.00	11,650.00	11,650.00	-2,843.14	0.00	2,843.14	0.00	-2,843.14	0.00
14,400.00	90.00	180.00	11,650.00	11,650.00	-2,943.14	0.00	2,943.14	0.00	-2,943.14	0.00
14,426.86	90.00	180.00	11,650.00	11,650.00	-2,970.00	0.00	2,970.00	0.00	-2,970.00	0.00

→ BHL-14426.86'MD,90.00°INC,180.00°AZI,11650.00'TVD, 2970.00'VS,*2970.00'N,0.00'E+ PBHL(P#1)...(2015) (1995) (1

arge	

Target Name - hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting		,
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	Latitude	Longitude
PBHL(P#1) - plan hits target - Point	0.00	360.00	11,650.00	-2,970.00	0.00	-2,970.000	0.000	30° 58' 55.125 N	105° 55' 43.648 W

Measured	Vertical	Local Coor	dinates	and the same and the same of
Depth (ft)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
11,200.00	11,200.00	0.00	0.00	KOP-11200.00'MD,0.00°INC,0.00°AZI,11200.00'TVD
11,906.86	11,650.00	-450.00	0.00	EOC-11906.86'MD,90.00°INC,180.00°AZI,11650.00'TVD,12.73°DLS, 4
14,426.86	11,650.00	-2,970.00	0.00	BHL-14426.86'MD,90.00°INC,180.00°AZI, 11650.00'TVD, 2970.00'VS,

	······································	· · · · · · · · · · · · · · · · · · ·
Checked By:	Approved By:	Date:

PECOS DISTRICT CONDITIONS OF APPROVAL

	OGX RESOURCES, LLC
LEASE NO.:	
WELL NAME & NO.:	PADUCA 30 FEDERAL #1
SURFACE HOLE FOOTAGE:	1980' FNL & 1980' FEL
BOTTOM HOLE FOOTAGE	330' FSL & 1980' FEL
LOCATION:	Section 30, T. 24 S., R 32 E., NMPM
COUNTY:	Lea 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 Site
Noxious Weeds
Special Requirements
Lesser Prairie Chicken
Ground-level Abandoned Well Marker
◯ Construction
Notification
Topsoil
Reserve Pit – Closed-loop mud system
Federal Mineral Material Pits
Well Pads
Roads
Road Section Diagram
☑ Drilling
H2S Requirements-Onshore Order #6
Cement Bond Log Required
CIT Required
Plugging Requirements
Production (Post Drilling)
Reserve Pit Closure/Interim Reclamation
Final Abandonment/Reclamation

I. GENERAL PROVISIONS

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

II. PERMIT EXPIRATION

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

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

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

IV. NOXIOUS WEEDS

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

V. SPECIAL REQUIREMENT(S)

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

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. For more installation details, contact the Carlsbad Field Office at 575-234-5972.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Hobbs Field Station at (575) 393-3612 at least 3 working days prior to commencing construction of the access road and/or well pad.

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

B. TOPSOIL

The operator shall stockpile the topsoil of the well pad. The topsoil shall not be used to backfill the reserve pit and will be used for interim and final reclamation.

C. RESERVE PITS

The operator has applied for a closed-loop system. The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT

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

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

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

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

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

VII. DRILLING – Re-entry

A. DRILLING OPERATIONS REQUIREMENTS

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

- a. BOPE tests
- b. Setting and Cementing the production casing strings
- c. CIT test
- d. Plugs

⊠ Lea County

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 393-3612

- 1. Hydrogen Sulfide has been reported as a hazard in formations deeper than the proposed depth. It is recommended that monitoring equipment be onsite for potential Hydrogen Sulfide. 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.

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.

B. CASING - Re-entry

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.

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

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

1. The 13-3/8" surface casing is set at 719 feet with cement circulated to surface.

A CIT is to be performed on the intermediate casing per Onshore Oil and Gas Order 2.III.B.1.h prior to drilling the shoe plug.

2. The 10-3/4" intermediate casing is set at 4,600' feet with cement circulated to surface.

A cement bond log is required to determine the top of cement on the 7-5/8" production casing. The BLM will evaluate the CBL and revise the conditions of approval accordingly.

3. The 7-5/8" Production easing is set at 12,834' feet with cement to the top of easing. The back production easing to surface and circulate cement to surface.

Additional cement may be required as the excess cement calculated to be -29%.

Prior to setting whipstock, the plug at 12,675' must be drilled out and a 25 sack plug is to be set across the production casing shoe at 12,885'. WOC and tag no shallower than 12,785'. An additional 25 sack plug must be set across the liner top at 12,675'. WOC and tag no shallower than 12,575'. These plugs can be combined into one plug from 12,885' to 12,575', which will save a tag and WOC time.

A CIT is to be performed on the production casing per Onshore Oil and Gas Order 2.III.B.1.h prior to setting the whipstock.

Formation below the kick off point (KOP) to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the KOP and the mud weight for the bottom of the hole. Report results to BLM office.

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

- 4. The minimum required fill of cement behind the 4-1/2 inch production liner is:
 - Cement to top of liner. Operator shall provide method of verification.
- 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.

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 5000 (5M) psi. 5M/10M system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 3. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. The tests shall be done by an independent service company.
 - b. The results of the test shall be reported to the appropriate BLM office.
 - c. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
 - d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test

plug and 30 minutes without a test plug.

e. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the **Wolfcamp** formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

D. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** formation, and shall be used until production casing is run and cemented.

Proposed mud weight may not be adequate for drilling through Wolfcamp.

E. DRILL STEM TEST

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

CRW 100709

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

IX. INTERIM RECLAMATION & RESERVE PIT CLOSURE

A. INTERIM RECLAMATION

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

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

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

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

Seed Mixture 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 see 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>
0 11 100		· · · · · · · · · · · · · · · · · · ·		1.0
Sand dropseed (S				1.0
Sand love grass (1.0
Plains bristlegras	s (Setar	ia macros	stachya) 🗈	. 2.0

^{*}Pounds of pure live seed:

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

X. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

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

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

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. For more installation details, contact the Carlsbad Field Office at 575-234-5972.