

OCD-ARTESIA

Month - Year

MAY 25 2007

OCD - ARTESIA, NM

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

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. <b>NM 110829</b>	
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name	
2. Name of Operator <b>OGX Resources, LLC</b>		7. If Unit or CA Agreement, Name and No.	
3a. Address <b>POB 11148, Midland, TX 79702</b>		8. Lease Name and Well No. <b>Browning Federal Com #1 36530</b>	
3b. Phone No. (include area code) <b>432-335-1287</b>		9. API Well No. <b>30-015-35638</b>	
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface <b>1980' FSL and 1900' FEL</b> At proposed prod. zone <b>Same as above</b>		10. Field and Pool, or Exploratory <b>Malaga Morrow, West (Gas)</b>	
11. Sec., T. R. M. or Blk. and Survey or Area <b>Sec 17, T-24S, R-28E</b>		12. County or Parish <b>Eddy</b>	
13. State <b>NM</b>		14. Distance in miles and direction from nearest town or post office* <b>6 miles Southwest of Loving, New Mexico</b>	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) <b>1900'</b>	16. No. of acres in lease <b>320</b>	17. Spacing Unit dedicated to this well <b>S/2 of Section 17</b>	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. <b>N/A</b>	19. Proposed Depth <b>12,900'</b>	20. BLM/BIA Bond No. on file <b>NMB 000244</b>	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>3057'</b>	22. Approximate date work will start* <b>07/01/2007</b>	23. Estimated duration <b>50 days</b>	

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.  | 5. Operator certification   |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the BLM.             |

25. Signature <b>Angela Lightner</b>	Name (Printed/Typed) <b>Angela Lightner</b>	Date <b>04/24/2007</b>
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Approved by (Signature) <b>Don Peterson</b>	Name (Printed/Typed) <b>Don Peterson</b>	Date <b>MAY 23 2007</b>
Title <b>FIELD MANAGER</b>	Office <b>CARLSBAD FIELD OFFICE</b>	

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

**APPROVAL FOR TWO YEARS**

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS  
AND SPECIAL STIPULATIONS  
ATTACHED**

**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**

If earthen pits are used in association with the drilling of this well, an OCD pit permit must be obtained prior to pit construction.

United States Department of the Interior  
Bureau of Land Management  
Roswell Field Office  
2909 Second Street  
Roswell, New Mexico 88201-1287

Statement Accepting Responsibility for Operations

Operator Name: OGX Resources LLC  
Street or Box: P.O. Box 11148  
City, State: Midland, Texas  
Zip Code: 79702

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

Lease No:

Legal Description of Land:

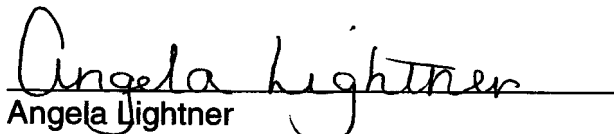
Township 24 South, Range 28 East, Eddy, New Mexico

S/2 of Section 17

Bond Coverage:

Statewide Oil and Gas Surety Bond, OGX Resources, LLC

BLM Bond File No.: NMB-000244

  
Angela Lightner  
Agent  
April 24, 2007

DISTRICT I  
1635 N. French Dr., Hobbs, NM 88240  
DISTRICT II  
1301 W. Grand Avenue, Artesia, NM 88210  
DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410  
DISTRICT IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised October 12, 2005

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 80925	Pool Name Malaga Morrow, West (Gas)
Property Code	Property Name BROWNING FEDERAL COM	Well Number 1
OGED No.	Operator Name OGX RESOURCES, L.L.C.	Elevation 3057'

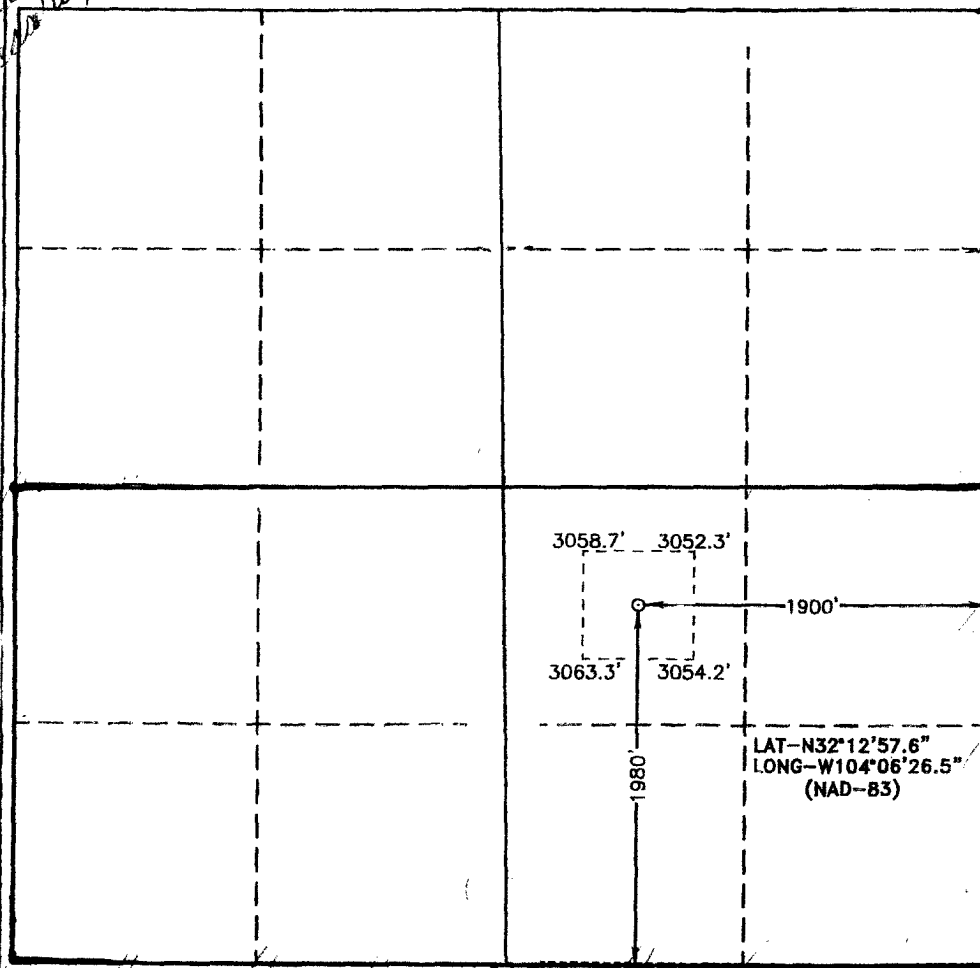
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	17	24 S	28 E		1980	SOUTH	1900	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 320	Joint or Infill	Consolidation Code	Order No.						

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

Angela Hightner 4/17/07  
Signature Date  
Angela Hightner  
Printed Name

SURVEYOR CERTIFICATION

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

APRIL 04 2007

Date Surveyed by Gary L. Jones  
Signature & Seal of Gary L. Jones  
Professional Surveyor

W.S. Jones 1868

Certificate No. Gary L. Jones 7977

Basin Surveys

EXHIBIT A

**OGX Resources  
Well Prognosis  
Browning Federal Com #1**

**API # 30-015-**

Surface Location: 1980' FSL & 1,900' FEL  
Sec. 17, T24S, R28E  
Eddy County, New Mexico

Proposed Bottom Hole Location: Same as Surface

Planned AFE Total Depth: 12,900 TVD / 12,900' MD

Contractor: Rig: Permian Drilling Rig 3

Prepared By: Randell Ford & R. K. Ford & Associates

**Proposed Drilling and Completion Summary**

The Browning Fed Com #1 well is planned as a 12,900' TVD / 12,900' MD. The Morrow is the primary objective.

This project is located approximately 6 miles Southwest of Malaga, Eddy County, New Mexico. Casing includes 20" structural/conductor, 13 3/8" surface, 9 5/8" intermediate, 7" intermediate, and 4 1/2" production liner. The well is planned to be drilled as a vertical well to TD. Formation evaluation will be performed using open-hole logging tools. A well completion procedure will be prepared by engineering after the well is evaluated. Production tubing will be 2 3/8" to handle anticipated production rates.

**DIRECTIONS**

From the junction of US Hwy 285 and Co. R. 720 (Black River Village), proceed west approx. 2.5 miles to lease road. On lease road go south approx 0.2 miles winding southeast approx. 1.0 miles to proposed lease road.

**ESTIMATED RIG ELEVATION: 3,057' K.B. 3079 G.L.**

**ESTIMATED FORMATION TOPS: (These Tops Are Only ESTIMATED)**

<u>Formation</u>	<u>TVD</u>	<u>Subsea</u>
Delaware	2,500'	
Cherry Canyon	3,300'	
Brushy Canyon	5,200'	
Bone Spring	6,150'	
1 <sup>st</sup> Bone Spring Sd	7,040'	
2 <sup>nd</sup> Bone Spring Sd	7,860'	
3 <sup>rd</sup> Bone Spring Sd	9,000'	
Wolfcamp	9,400'	
Cisco – Canyon	10,750'	
Strawn	11,600'	
Atoka	11,800'	
Morrow	12,100'	
Middle Morrow	12,300'	
Lower Morrow	12,400'	

**CASING PROGRAM:**

<u>SIZE</u>	<u>WEIGHT</u>	<u>GRADE</u>	<u>COUPLING</u>	<u>(MD-RKB)</u>	<u>TORQUE</u>
20"	Structural Pipe	LP			0-40'
13 3/8"	48.0 ppf	J-55	ST&C		0-520'
9 5/8"	36.0 ppf	J-55	LT&C		0-2,460'
7"	26.0 ppf	P-110	LT&C		0-9,500'
4 1/2"	11.6 ppf	P-110	LT&C		9,100 – 12,900'

**LOGGING PROGRAM:**

8 3/4" Hole, 2,460' – 9,500', Gamma Ray, Dual Lateralog, Micro Lateralog, Photo Density, Comp/Neutron only back to surface.

6 1/8" Hole, Gamma Ray, Dual Laterolog, Micro Lateralog, Photo Density, Comp/Neutron logged from TD – casing at 9,500' (Tie-in to previous run). Possible HMI-Imager.

**MUD PROGRAM:**

<u>DEPTH</u>	<u>MW</u>	<u>Viscosity</u>	<u>WL</u>	<u>Synopsis</u>
0'- 520'	8.6-8.8	36-38 vis	NC	Spud mud, paper.
520'- 2,460'	10.0-10.1	29-30 vis	NC	Brine
2,460' – 9500'	8.4-10.0	28-29 vis	NC	Fresh to Brine
9,500'-11,000'	8.4-10.0	28-29 vis	NC	Fresh to Brine
11,000'-12,900'	11.0-13.5	38-45 vis	10-6	Dynazan/Starch
				*Calcium Carbonate

**See attached mud program for additional specifications.**

**MUD LOGGING:**

Mud logging unit is rigged up and logging at 1900'. Collect 10' samples from 2,600' to TD. **Note: Mud logger to pick 9 5/8" & 7" casing points.**

**DRILLSTEM TESTS/ CORES:**

None planned

**DRILLING PROCEDURE**

**I. LOCATION PRE-SPUD**

1. Set 40' of 20" conductor prior to rig up.
2. Review State Permit, offset well data, procedure, formation depths and BOP/casing testing requirements. Hold pre-spud meeting with vendors and operator. Rig up Permian Rig 3, prepare to spud well. Visually inspect rig's 13 3/8" 10M BOP's (replace and repair as required). Record and report fuel on location at spud.

**II. SURFACE HOLE                      INTERVAL 40'- 520'**

1. Spud with a 17-1/2" rental mill tooth bit and BHA with sufficient 8" drill collars to supply necessary bit weights. Stabilizers as needed to ensure a straight hole. (Record time and date of spud on morning report.) Pump gel sweeps as needed and before and after any trips. Survey as required to monitor deviation.
2. Surface hole to be drilled with a fresh water gel/lime spud mud with following properties: MW 8.6-8.8 VISC 36-38, API-FL N/C. Pump a high visc sweep prior to running casing. Strap DP and DCs out of hole.
3. Rig up casing tools and run casing as follows:
  - 13-3/8" Texas Pattern Guide Shoe
  - 1 Joint 13-3/8", 48.0 ppf, J-55, STC Casing
  - 13-3/8" Float Collar
  - +/- 500' 13-3/8", 48.0 ppf, J-55, STC Casing

4. Centralize with (6) centralizers placed as follows: middle of shoe jt., top of 2nd jt., top of 4th jt., then every third jt. Thread lock all float equipment (top & bottom).
5. Pump capacity of casing prior to commencing any cementing operations. Tag and land casing on bottom. Hold running weight tension while WOC. Cement: 1<sup>st</sup> lead slurry- 200 sxs Class H cmt + 1% bwoc Calcium Chloride + 0.25 lbs/sxs Cello Flake + 10 lbs/sxs LCM-1 + 50% Fresh Water. 2<sup>nd</sup> lead slurry- 300 sxs (35:65) Poz (Fly Ash): Class C cmt. + 2% bwoc Calcium Chloride + 0.25 lbs/sxs Cello Flake + 6% bwoc Bentonite + 96.6% Fresh Water. Tail slurry- 200 sxs Class C cmt. + 2% bwoc Calcium Chloride + 56.4% Fresh Water. (Volumes based on 100% excess of calculated volume for gauge hole). WOC total of 2 - 4 hours or until tail slurry has attained 500 psi compressive strength (use location water sample to get lab results).
6. Cut off 13-3/8" to weld on 13-3/8" 3M SOW casinghead and test to 70% of collapse. Ensure wellhead height matches production requirements and BOPs heights.

### **III. INTERMEDIATE HOLE SECTION      INTERVAL 520' – 2,460'**

1. Nipple up 13-3/8" 10M BOP equipment. Test BOP and choke manifold to 1500 psi. Check gauge on choke panel for accurate pressures, replace it if required. RIH with 12 1/4" insert bit and BHA with sufficient 8" drill collars to supply necessary bit weights. Stabilizers as needed to ensure a straight hole. Test 13-3/8" casing to 500 psi.
2. Drill float collar, cement with lead slurry- 630 sxs (50:50) Poz (Fly Ash): Class C cmt. + 5% bwow Sodium Chloride + 0.25 lbs/sxs Cello Flake + 5 lbs/sxs LCM-1 10% bwoc Bentonite + 134.8% Fresh Water. Tail slurry- 200 sxs Class C cmt. + 2% bwoc Calcium Chloride + 56.4 % Fresh Water. Float shoe. If first 20' of float shoe joint drills with wet cement, WOC prior to drilling remainder of joint and notify office.
3. Drill and survey a straight hole. Survey every 300' or more often as required to monitor deviation. Circulation rates as needed to ensure good hole cleaning.

4. This interval to be drilled with brine water having the following properties: MW 10.0-10.1, VISC 29-30, API-FL N/C, circulating the inside reserve pit. If lost circulation is encountered, refer to procedures in mud program.
5. When  $\pm 2,460'$ , casing point is reached, circulate and condition hole in preparation to run casing. Sweep the hole with 150 bbl 50 visc fresh gel sweep prior to running casing.
6. Rig up casing tools and run casing as follows:
  - 9-5/8" Float Shoe
  - (1) Joint 9-5/8", 36.0 ppf, J-55, LT&C Casing
  - 9-5/8" Float Collar
  - +/- 2,050', 9-5/8", 36.0 ppf, J-55, LT&C Casing
7. Centralize with (5) centralizers placed as follows: middle of shoe jt., top of 2nd jt., top of 4th jt., then every fourth jt. Thread lock all float equipment (top & bottom).
8. Cement per cement prognosis. Pump capacity of casing prior to commencing any cementing operations. Tag and land casing on bottom, hold running weight tension while WOC. Cement per prognosis (volumes based on fluid caliper results). WOC total of 24 hours or until tail slurry has attained 500 psi compressive strength (use location water sample to get lab results).
9. Cut off 9-5/8" and set in 13-3/8" casinghead bowl. Nipple up 13-5/8" 3M x 11" 5M casing spool (Test casing to 70% of collapse) and BOP equipment. Test BOP and choke manifold to 5,000 psi or full working pressure. Check gauge on choke panel for accurate pressures, replace it if required. Ensure wellhead height matches production requirements and BOPs heights. Install dual super chokes, PVT and flow sensors, mud-gas separator and bar bins.

#### **IV. INTERMEDIATE HOLE SECTION      INTERVAL 2,460' – 9,500' TD**

1. RIH with 8 3/4" insert button bit and BHA with sufficient 6 1/2" drill collars to supply necessary bit weights. Stabilizers as needed to ensure a straight hole. Test 9-5/8" casing to 1500 psi.



2. Drill float collar, cement with Lead slurry- 825 sxs (50:50) Poz (Fly Ash): Class H cmt. + 5% bwoc Sodium Chloride + 0.125 lbs/sxs Cello Flake + 10% bwoc Bentonite + 0.3% FL-52A + 139.7% Fresh Water. Tail slurry- 200 sxs Class H cmt. + 0.5% bwoc FL-25 + 46.2% Fresh Water. Float shoe. If first 20' of float shoe joint drills with wet cement, WOC prior to drilling remainder of joint and notify office.
3. Drill and survey a straight hole to  $\pm 9,500$  T.D. Survey every 500' or more often as required to monitor deviation. Circulation rates as needed to ensure good hole cleaning.
4. Drill out casing with fresh water, mud wt. 8.4-10.0, vis. 28-29, API-FL N/C, fresh to brine, circulating through the outside reserve pit. Pump sweeps as needed to ensure good hole cleaning. If lost circulation is encountered, refer to procedures in mud program.
5. At total depth circulate and condition hole, short trip, circulate and condition, POH (strapping DP and DCs). Rig up loggers and run wireline logs as proposed or as dictated by the office.
6. Trip in hole. Circulate and condition hole in preparation to run casing.
7. Trip out of hole. Lay down DP and DC's.
8. Rig up casing tools and run 7" casing as follows:  
  
7" Float Shoe  
(1) Joint 7" 26.0 ppf, P-110, LT&C  
7" Float Collar  
 $\pm 9,350'$ , 7" 26.0 ppf, P-110, LT&C
9. Pump capacity of casing prior to commencing any cementing operations.

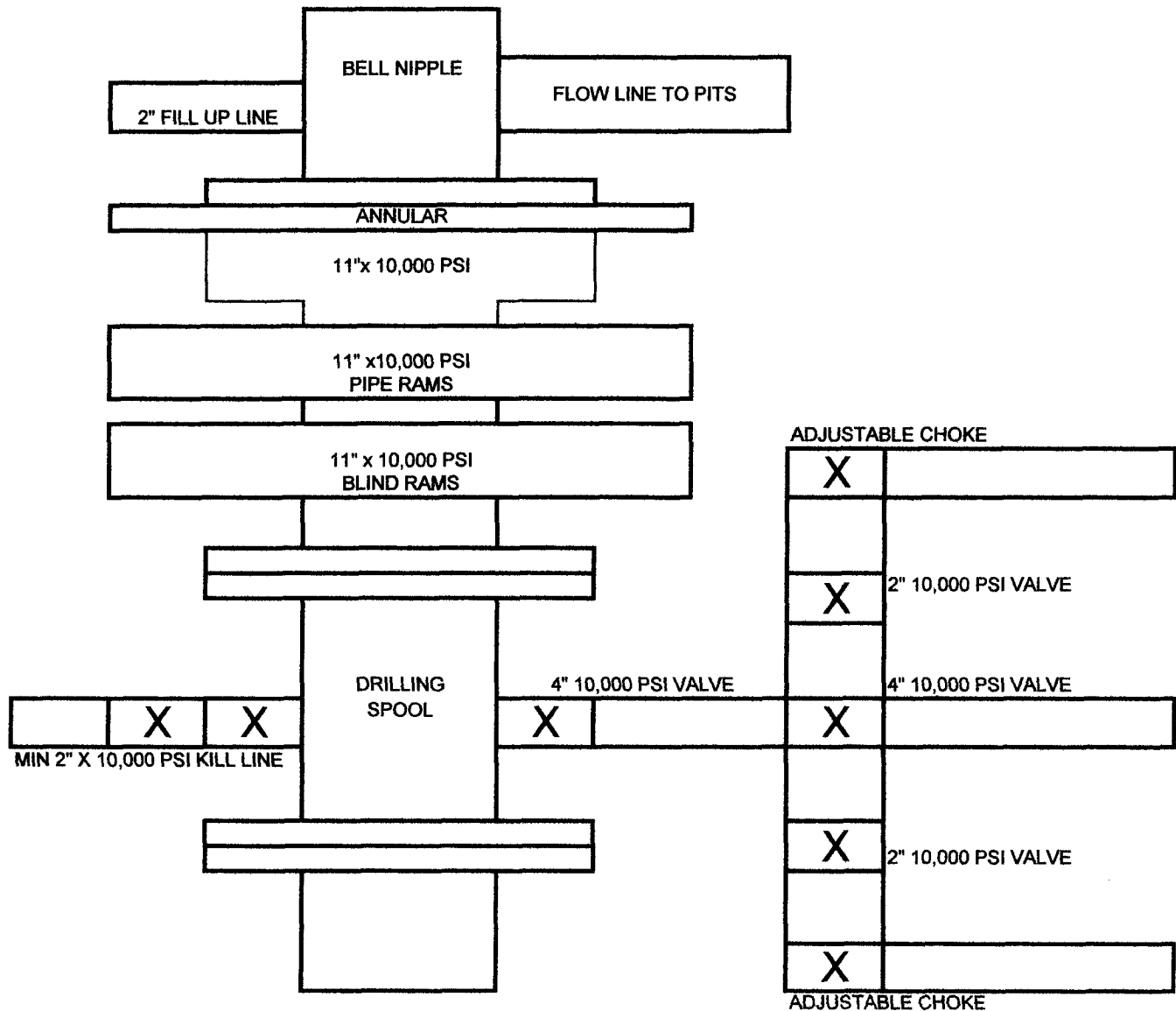
**V. FINAL HOLE SECTION      INTERVAL 9,500' – 12,900' TD**

1. Nipple Up 7 1/16" 10M BOP and Choke manifold. Test to full working pressure. RIH with 6-1/8" insert button bit and BHA with sufficient drill collars to supply necessary bit weights. Test 7" casing to 2,000 psi.

2. Drill float collar, cement with 415 sxs Class H cmt. + 0.4% bwoc BA-10 + 0.3% bwoc CD-32 + 1% bwoc FL-62 + 45.5% Fresh Water. Float shoe. If first 20' of float shoe joint drills with wet cement, WOC prior to drilling remainder of joint and notify office.
3. Drill and survey a straight hole to  $\pm 12,900'$  T.D. Survey every 500' or more often as required to monitor deviation. Circulation rates as needed to ensure good hole cleaning. Record slow pump rates everyday and every time mud proportion changes.
4. Drill out casing with existing mud; mud wt. 8.4-10.0, vis. 28-29 API-FL N/C, fresh to brine, circulating through the working pits. Pump sweeps as needed to ensure good hole cleaning. If lost circulation is encountered, refer to procedures in mud program. Mud up at 11,000' to 11.0-13.5, vis. 38-45, with XCD Polymer, add Calcium Carbonate as needed to stabilize hole and provide safe conditions for trips.
5. At total depth, circulate and condition mud and hole, short trip, circulate and condition, POH (strapping DP and DCs). Rig up loggers and run wire line logs as proposed or as dictated by the office.
6. Trip in hole. Circulate and condition mud and hole in preparation to run production liner.
7. Trip out of hole with drill pipe. Prepare to run liner.
8. Rig up casing tools and run 4 1/2" liner as follows:
  - 4 1/2" Dual Valve Float Shoe
  - (1) Joint 4 1/2" 11.6 ppf, P-110, LT&C
  - 4 1/2" Landing Collar
  - $\pm 3,400'$  4 1/2" 11.6 ppf, P-110, LT&C
  - 7" x 4 1/2" liner hanger assembly
  - 8,000# liner top packer & tieback
9. Check and record liner weight before tripping in the hole. Trip in hole with liner under full hydromatic. Fill drill string every 10 stands while tripping in the hole with liner. Pick up manifold and wash liner to bottom. Circulate liner for 15 minutes. Hang liner off. Rotate out of liner. Pickup drill string and check weight to make sure liner is hung off. Pump capacity of liner and drill string prior to commencing any cementing operations.

10. Cement per cement prognosis. Displace liner with fresh water and drill string with drilling mud. Do not over displace. Pickup drill string approx. 12', set back down and set liner top packer with 30,000# or more. Pull 10 stands of drill pipe. Pickup Kelly. Circulate annulus 150% and rotate drill string while circulating. TOOH with liner stinger and lay down.
11. TIH with 6-1/8" bit and drilling assembly to 6,000' and circulate. Drill cement off liner top after total cement time of 18 hours. Circulate hole clean. Test liner top or displace hole with fresh water or KCL water.
12. Lay down drill string. Nipple down BOP's. Nipple up wellhead. Clean pits. Release drilling rig and all rental equipment. Record and report fuel on location at rig release.
13. Refer to completion procedure.

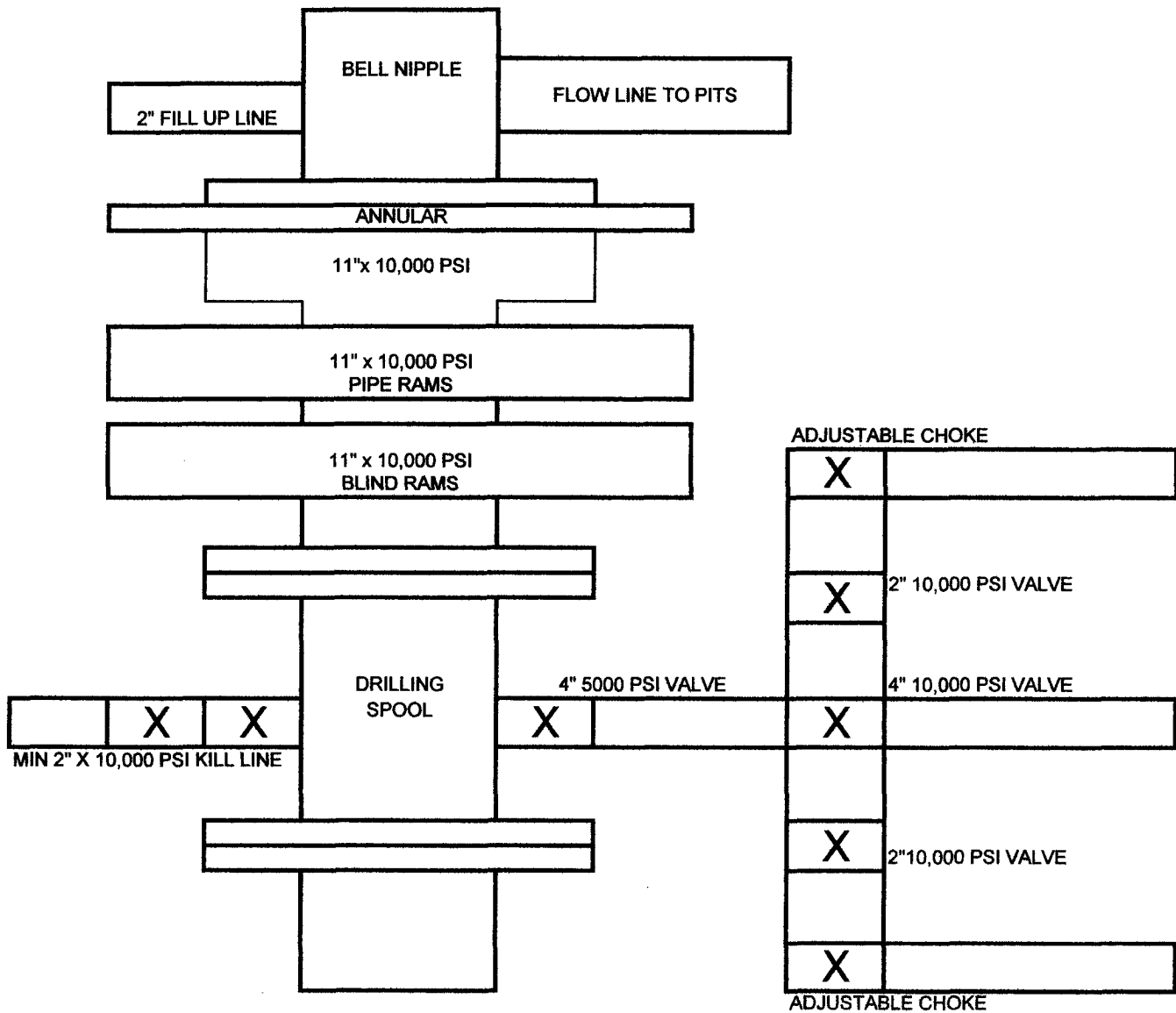
BOP SCHEMATIC FOR  
12-1/4" HOLE



OGX Resources, LLC  
Browning Federal Com. #1  
Eddy County, New Mexico

Exhibit 1

BOP SCHEMATIC FOR  
9-1/2" HOLE



OGX Resources, LLC  
Browning Federal Com. #1  
Eddy County, New Mexico

Exhibit 2

# Newport Drilling Fluids, LLC

## OGX Resources, LLC

### Browning Fed Com #1

Section 17, T-24-S, R-28-E

Eddy County, New Mexico

#### PROGRAM HIGHLIGHTS:

TOTAL DEPTH	:	12,900'
CASING REQUIREMENTS	:	Interval 1: 17-1/2" hole to 520', set 13-3/8" casing.
	:	Interval 2: 12-1/4" hole to 2,460', set 9-5/8" casing.
	:	Interval 3: 8-3/4" hole to 9,500', set 7" casing.
	:	Interval 4: 6-1/8" hole to 12,900', set 4-1/2" liner.
MUD WEIGHT REQUIREMENTS	:	8.6 - 8.8 ppg @ 520'
	:	10.0 - 10.1 ppg @ 2,460'
	:	8.4 - 10.0 ppg @ 9,500'
	:	11.0 - 13.5 ppg @ 12,900'

#### MUD PROPERTIES SUMMARY:

0' - 520' Set 13-3/8" Casing	8.6 - 8.8	36 - 38	N/C	6 - 10	6 - 20	Spud Mud
520' - 2,460' Set 9-5/8" Casing	10.0 - 10.1	29 - 30	N/C	0 - 1	0 - 1	Brine
2,460' - 9,500' Set 7" Liner	8.4 - 10.0	28 - 29	N/C	0 - 1	0 - 1	Fresh Water to Brine
9,500' - 11,000'	8.4 - 10.0	28 - 29	N/C	0 - 1	0 - 1	Fresh Water to Brine
11,000' - 12,900' Set 4-1/2"	11.0 - 13.5	38 - 45	10 - 6	6 - 20	14 - 24	Dynazan / Starch *Calcium Carbonate

**Note:** The mud weight schedule is intended as a guideline only. Actual mud weights used should be determined by hole conditions and drilling parameters.

\*Calcium Carbonate will be used as the weighting agent in all pipe slugs and mud weight increases.

ABSOLUTELY NO BARITE WILL BE USED. If weights are needed above 12.0 ppg, Barite will only be used after a thorough discussion with the operator.



Proposal No: 180268460A

**OGX Resources LLC  
Browning Federal Com #1**

17 24S 28E  
Eddy County, New Mexico  
April 13, 2007

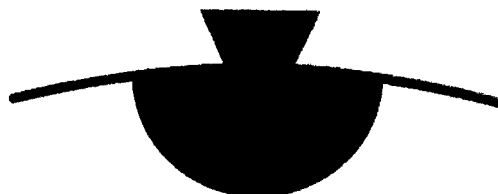
**Well Recommendation**

**Prepared for:**

Randy Ford  
OGX Resources LLC  
OGX Resources LLC  
Email: randell@rkford.com

**Prepared by:**

Juan A Coronado  
Region Engineer  
Midland, Texas  
Bus Phone: (432) 688-9142  
Mobile: (432) 634-9636



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Fax: (505) 746-2293

**Service Representatives:**

Van Harris  
Senior Account Manager  
Bus Phone: (432) 683-2781  
Fax: (432) 683-5947

**Operator Name:** OGX Resources LLC  
**Well Name:** Browning Federal Com #1  
**Job Description:** 13 3/8" Surface Casing  
**Date:** April 13, 2007



**Proposal No:** 180268460A

## WELL DATA

### ANNULAR GEOMETRY

ANNULAR I.D. (in)	DEPTH(ft)	
	MEASURED	TRUE VERTICAL
17.500 HOLE	520	520

### SUSPENDED PIPES

DIAMETER (in)		WEIGHT (lbs/ft)	DEPTH(ft)	
O.D.	I.D.		MEASURED	TRUE VERTICAL
13.375	12.715	48	520	520

Float Collar set @ 480 ft  
 Mud Density 8.40 ppg  
 Est. Static Temp. 84 ° F  
 Est. Circ. Temp. 80 ° F

### VOLUME CALCULATIONS

0 ft	x	0.6946 cf/ft	with ***** % excess	=	278.7 cf
352 ft	x	0.6946 cf/ft	with 130 % excess	=	562.8 cf
168 ft	x	0.6946 cf/ft	with 100 % excess	=	233.7 cf
40 ft	x	0.8818 cf/ft	with 0 % excess	=	35.3 cf (inside pipe)
<b>TOTAL SLURRY VOLUME</b>				=	1110.5 cf
				=	198 bbls



**Operator Name:** OGX Resources LLC  
**Well Name:** Browning Federal Com #1  
**Job Description:** 13 3/8" Surface Casing  
**Date:** April 13, 2007



**Proposal No:** 180268460A

### FLUID SPECIFICATIONS

Spacer	10.0 bbls Fresh Water @ 8.34 ppg
Spacer	30.0 bbls Mud Sweep II @ 8.34 ppg
Spacer	10.0 bbls Fresh Water @ 8.34 ppg

<u>FLUID</u>	<u>VOLUME CU-FT</u>	<u>VOLUME FACTOR</u>	<u>AMOUNT AND TYPE OF CEMENT</u>
1st Lead Slurry	279	/ 1.3	= 200 sacks Class H Cement + 1% bwoc Calcium Chloride + 0.25 lbs/sack Cello Flake + 10 lbs/sack LCM-1 + 50% Fresh Water
2nd Lead Slurry	563	/ 1.8	= 300 sacks (35:65) Poz (Fly Ash):Class C Cement + 2% bwoc Calcium Chloride + 0.25 lbs/sack Cello Flake + 6% bwoc Bentonite + 96.6% Fresh Water
Tail Slurry	269	/ 1.3	= 200 sacks Class C Cement + 2% bwoc Calcium Chloride + 56.4% Fresh Water
Displacement			75.4 bbls Displacement @ 8.34 ppg

### **CEMENT PROPERTIES**

	<b>SLURRY NO. 1</b>	<b>SLURRY NO. 2</b>	<b>SLURRY NO. 3</b>
Slurry Weight (ppg)	14.60	12.70	14.80
Slurry Yield (cf/sack)	1.39	1.88	1.34
Amount of Mix Water (gps)	5.63	10.07	6.36
Estimated Pumping Time - 70 BC (HH:MM)	2:00	4:30	3:30

### NOTES:

Add 2 sacks LCM provided by operator to Mud Clean II

Pump 1st Lead Slurry for Lost Circulation.

Operator Name: OGX Resources LLC  
 Well Name: Browning Federal Com #1  
 Job Description: 9 5/8" Intermediate Casing  
 Date: April 13, 2007



Proposal No: 180268460A

## WELL DATA

### ANNULAR GEOMETRY

ANNULAR I.D. (in)	DEPTH(ft)	
	MEASURED	TRUE VERTICAL
12.715 CASING	520	520
12.250 HOLE	2,460	2,460

### SUSPENDED PIPES

DIAMETER (in)		WEIGHT (lbs/ft)	DEPTH(ft)	
O.D.	I.D.		MEASURED	TRUE VERTICAL
9.625	8.921	36	2,460	2,460

Float Collar set @ 2,420 ft  
 Mud Density 9.00 ppg  
 Est. Static Temp. 99 ° F  
 Est. Circ. Temp. 91 ° F

### VOLUME CALCULATIONS

520 ft	x	0.3765 cf/ft	with	0 % excess	=	195.8 cf
1,538 ft	x	0.3132 cf/ft	with	180 % excess	=	1349.0 cf
402 ft	x	0.3132 cf/ft	with	100 % excess	=	251.6 cf
40 ft	x	0.4341 cf/ft	with	0 % excess	=	17.4 cf (inside pipe)
<b>TOTAL SLURRY VOLUME</b>					=	1813.7 cf
					=	323 bbls

**Operator Name:** OGX Resources LLC  
**Well Name:** Browning Federal Com #1  
**Job Description:** 9 5/8" Intermediate Casing  
**Date:** April 13, 2007



**Proposal No:** 180268460A

### FLUID SPECIFICATIONS

Spacer	10.0 bbls Fresh Water @ 8.34 ppg
Spacer	30.0 bbls Mud Clean II @ 8.34 ppg
Spacer	10.0 bbls Fresh Water @ 8.34 ppg

<u>FLUID</u>	<u>VOLUME CU-FT</u>	<u>VOLUME FACTOR</u>	<u>AMOUNT AND TYPE OF CEMENT</u>
Lead Slurry	1545	/ 2.4	= 630 sacks (50:50) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.25 lbs/sack Cello Flake + 5 lbs/sack LCM-1 + 10% bwoc Bentonite + 134.8% Fresh Water
Tail Slurry	269	/ 1.3	= 200 sacks Class C Cement + 2% bwoc Calcium Chloride + 56.4% Fresh Water
Displacement			187.1 bbls DISPLACEMENT @ 8.3 ppg

### **CEMENT PROPERTIES**

	<b>SLURRY NO. 1</b>	<b>SLURRY NO. 2</b>
Slurry Weight (ppg)	11.80	14.80
Slurry Yield (cf/sack)	2.45	1.34
Amount of Mix Water (gps)	13.57	6.36
Estimated Pumping Time - 70 BC (HH:MM)	4:00	2:30

### **NOTES:**

Add 2 sacks of LCM provided by operator to Mud Clean II

**Operator Name:** OGX Resources LLC  
**Well Name:** Browning Federal Com #1  
**Job Description:** 7" Production Casing- One Stage Option  
**Date:** April 13, 2007



**Proposal No:** 180268460A

## WELL DATA

### ANNULAR GEOMETRY

ANNULAR I.D. (in)	DEPTH(ft)	
	MEASURED	TRUE VERTICAL
8.921 CASING	2,460	2,460
8.500 HOLE	9,500	9,500

### SUSPENDED PIPES

DIAMETER (in)		WEIGHT (lbs/ft)	DEPTH(ft)	
O.D.	I.D.		MEASURED	TRUE VERTICAL
7.000	6.276	26	9,500	9,500

Float Collar set @	9,460 ft
Mud Density	10.00 ppg
Est. Static Temp.	152 ° F
Est. Circ. Temp.	134 ° F

### VOLUME CALCULATIONS

150 ft	x	0.1668 cf/ft	with	0 % excess	=	25.0 cf
6,040 ft	x	0.1268 cf/ft	with	160 % excess	=	1991.4 cf
1,000 ft	x	0.1268 cf/ft	with	80 % excess	=	227.7 cf
40 ft	x	0.2148 cf/ft	with	0 % excess	=	8.6 cf (inside pipe)
<b>TOTAL SLURRY VOLUME</b>					=	2252.8 cf
					=	402 bbls

**Operator Name:** OGX Resources LLC  
**Well Name:** Browning Federal Com #1  
**Job Description:** 7" Production Casing- One Stage Option  
**Date:** April 13, 2007



**Proposal No:** 180268460A

### FLUID SPECIFICATIONS

Spacer 10.0 bbls Fresh Water @ 8.34 ppg  
 Spacer 30.0 bbls Mud Clean II @ 8.34 ppg  
 Spacer 10.0 bbls Fresh Water @ 8.34 ppg

<u>FLUID</u>	<u>VOLUME CU-FT</u>	<u>VOLUME FACTOR</u>	<u>AMOUNT AND TYPE OF CEMENT</u>
Lead Slurry	2016	/ 2.4	= 825 sacks (50:50) Poz (Fly Ash):Class H Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 10% bwoc Bentonite + 0.3% bwoc FL-52A + 139.7% Fresh Water
Tail Slurry	236	/ 1.1	= 200 sacks Class H Cement + 0.5% bwoc FL-25 + 46.2% Fresh Water
Displacement			362.0 bbls DISPLACEMENT @ 8.3 ppg

### **CEMENT PROPERTIES**

	<u>SLURRY NO. 1</u>	<u>SLURRY NO. 2</u>
Slurry Weight (ppg)	11.80	15.60
Slurry Yield (cf/sack)	2.45	1.18
Amount of Mix Water (gps)	14.07	5.21
Estimated Pumping Time - 70 BC (HH:MM)	4:00	4:00

### **RHEOLOGIES**

<u>FLUID</u>	<u>TEMP</u>	<u>600</u>	<u>300</u>	<u>200</u>	<u>100</u>	<u>6</u>	<u>3</u>
Lead Slurry	@ 80 ° F	94	71	61	50	32	32
Tail Slurry	@ 80 ° F	230	127	87	46	3	2

NOTE: Add 2 sacks of LCM provided by operator to Mud Clean II

**Operator Name:** OGX Resources LLC  
**Well Name:** Browning Federal Com #1  
**Job Description:** 4 1/2" Liner  
**Date:** April 13, 2007



**Proposal No:** 180268460A

## WELL DATA

### ANNULAR GEOMETRY

ANNULAR I.D. (in)	DEPTH(ft)	
	MEASURED	TRUE VERTICAL
6.276 CASING	9,500	9,500
6.125 HOLE	12,900	12,900

### SUSPENDED PIPES

DIAMETER (in)		WEIGHT (lbs/ft)	DEPTH(ft)	
O.D.	I.D.		MEASURED	TRUE VERTICAL
4.500	4.000	11.6	12,900	12,900

Drill Pipe 4.5 (in) OD, 3.826 (in) ID, 16.6 (lbs/ft) set @ 8,900 ft

Drill Pipe 4.5 (in) OD, 4.0 (in) ID, 11.6 (lbs/ft) set @ 12,860 ft

Depth to Top of Liner 8,900 ft

Float Collar set @ 12,860 ft

Mud Density 10.00 ppg

Est. Static Temp. 178 ° F

Est. Circ. Temp. 142 ° F

### VOLUME CALCULATIONS

500 ft	x	0.1044 cf/ft	with	0 % excess	=	52 cf
3,400 ft	x	0.0942 cf/ft	with	35 % excess	=	432 cf
40 ft	x	0.0873 cf/ft	with	0 % excess	=	3 cf (inside pipe)
<b>TOTAL SLURRY VOLUME</b>					=	488 cf
					=	87 bbls

**Operator Name:** OGX Resources LLC  
**Well Name:** Browning Federal Com #1  
**Job Description:** 4 1/2" Liner  
**Date:** April 13, 2007



**Proposal No:** 180268460A

## **FLUID SPECIFICATIONS**

Spacer 500.0 gals Ultra Flush II + 202.34 lbs/bbl Barite, Bulk @ 12 ppg

<b>FLUID</b>	<b>VOLUME CU-FT</b>	<b>VOLUME FACTOR</b>	<b>AMOUNT AND TYPE OF CEMENT</b>
Cement Slurry	488	/ 1.1	= 415 sacks Class H Cement + 0.4% bwoc BA-10 + 0.3% bwoc CD-32 + 1% bwoc FL-62 + 45.5% Fresh Water

Displacement 188.1 bbls DISPLACEMENT @ 8.3 ppg

## **CEMENT PROPERTIES**

### **SLURRY NO. 1**

Slurry Weight (ppg)	15.60
Slurry Yield (cf/sack)	1.19
Amount of Mix Water (gps)	5.13
Estimated Pumping Time - 70 BC (HH:MM)	4:00
Free Water (mls) @ ° F @ 90 ° angle	0.0
Fluid Loss (cc/30min) at 1000 psi and ° F	50.0

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MULTI POINT SURFACE USE AND OPERATIONS PLAN FOR

**OGX Resources LLC**

**Browning Federal Com #1**

Surface Location: 1980' FSL & 1900' FEL

Section 17, T-24-S, R-28-E

Eddy County, New Mexico

Lease No.:

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the plan is to describe the location of the proposed well; the proposed construction activities and operations plan to be followed in rehabilitating the surface and environmental effects associated with the operation.

1. EXISTING ROADS:

- A. Exhibit "A" is a location verification map showing the location of the proposed well as staked.
- B. Directions: From the junction of Hwy 285 and Co. Rd. #720, go west for 2.5 miles to lease road. On lease road go south approx. 0.2 miles winding southeast approx. 1.0 miles to proposed lease road.

2. PLANNED ACCESS ROAD:

- A. Length and Width: Exhibit "C" is the proposed access road. It will be approximately 2580.7' long and 30' wide and run Southwest to the Northeast of the south half of section 17.
- B. Construction: The proposed access road will be constructed by grading and topping with compacted caliche. The surface will be properly drained.
- C. Turnouts: None required.
- D. Culverts: None necessary.
- E. Cuts and Fills: 1' cut to North with 1' fill to South.
- F. Gates and Cattle Guards: None
- G. Off lease right of way: None required.

**2-1. PLANNED PIPELINE**

- A. Length and Width: Exhibit "D" Pipeline will run along side the proposed road. It will be 2580.7 feet in length and a 20 foot wide right of way.
- B. The pipeline will be a 4 inch .188 wall thickness, 3mm epoxy exterior coating, and rated at 3000 psi. The pipeline will be buried as close to the road as possible

**3. LOCATION OF EXISTING WELLS:**

Existing wells in the immediate area are shown on the Vicinity Map, Exhibit "B".

**4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:**

- A. OGX Resources, LLC. has no production facility on this lease at this time.
- B. If the well proves to be commercial, the necessary production facilities, gas separation-process equipment and tank battery, if required, will be installed on the drilling pad.

**5. LOCATION AND TYPE OF WATER SUPPLY:**

It is planned to drill the proposed well with fresh water that will be obtained from private or commercial sources and will be transported over the existing and proposed access roads.

**6. SOURCE OF CONSTRUCTION MATERIAL:**

Caliche for surfacing the proposed access road and well site pad will be obtained from the location, if available, or from an approved Federal pit. No surface materials will be disturbed except those necessary for actual grading and leveling of the drill site and access road.

**7. METHODS OF HANDLING WASTE DISPOSAL:**

- A. Drill cuttings will be disposed of in the reserve pits.
- B. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.
- C. All pits will be fenced with normal fencing materials to prevent livestock from entering the area.

- D. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or a separate disposal application will be submitted to the BLM for approval.
- E. Oil Produced during tests will be stored in test tanks.
- F. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- G. All trash and debris will be removed from the well site within 30 days after finishing drilling and/or completion operations.

8. ANCILLARY FACILITIES:

None required.

9. WELL SITE LAYOUT:

- A. Exhibit "D" shows the relative location and dimensions of the well pad, reserve pits, and major rig components. The pad and pit area has been staked and flagged 600' x 600'.
- B. Mat Size: 225' x 300', plus 150' x 150' reserve pit on the north.
- C. Cut & Fill: 1' cut to North with 1' fill to South
- D. The surface will be topped with compacted caliche and the reserve pits will be plastic lined.

10. PLANS FOR RESTORATION OF THE SURFACE:

- A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. The well site will be cleaned of trash leaving the site aesthetically pleasing to the extent possible.
- B. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible. All pits will be filled and leveled as soon as they are dry enough to be worked.

11. OTHER INFORMATION:

- A. Surface Ownership – Federal Land

B. No significant archaeological resources were found in the area of the planned access road or of the proposed well site.

C. Oil & Gas Lease:

NM

Township 24 South, Range 28 East  
S/2 of Section 17

D. RECORD LESSEE:

OGX Resources, LLC

50%

EOG Resources, Inc.

50%

E. BOND COVERAGE:

\$25,000 Statewide Oil & Gas Surety Bond

BLM Bond #: NMB 000244

12. OPERATOR'S REPRESENTATIVE:

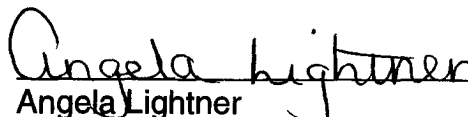
The field representative for assuring compliance with the approved use and operations plan is as follows:

R. K. Ford & Associates  
415 West Wall, Suite 1700  
Midland, Texas 79701  
432-682-0440 (Office)  
432-682-0441 (Fax)  
432-570-7216 (Home)  
432-559-2222 (Cell)  
Randell@rkford.com (E-mail)

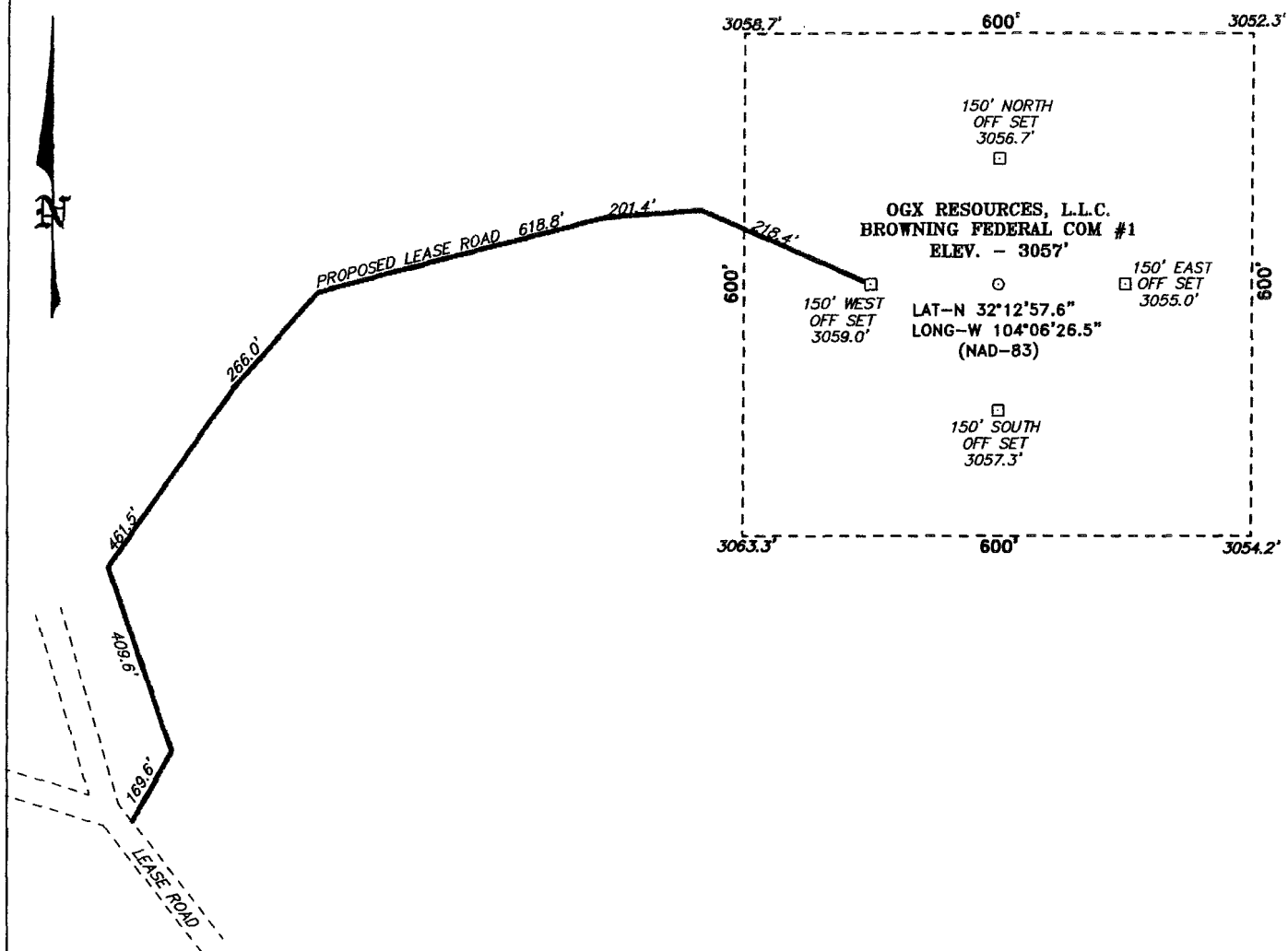
13. CERTIFICATION:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Cabal Energy Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

April 24, 2007

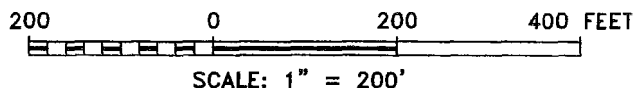
  
Angela Lightner  
Consultant

SECTION 17, TOWNSHIP 24 SOUTH, RANGE 28 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.



**DIRECTIONS TO LOCATION:**

FROM THE JUNCTION OF US HWY 285 AND CO. RD.  
720 (BLACK RIVER VILLAGE), PROCEED WEST APPROX  
2.5 MILES TO LEASE ROAD, ON LEASE ROAD GO  
SOUTH APPROX. 0.2 MILES WINDING SOUTHEAST  
APPROX. 1.0 MILES TO PROPOSED LEASE ROAD.



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

W.O. Number: 17968 Drawn By: J. M. SMALL

Date: 04-11-2007 Disk: JMS 17968W

**OGX RESOURCES, L.L.C.**

REF: BROWNING FEDERAL COM #1 / Well Pad Topo

THE BROWNING FEDERAL COM No. 1 LOCATED 1980' FROM  
THE SOUTH LINE AND 1900' FROM THE EAST LINE OF  
SECTION 17, TOWNSHIP 24 SOUTH, RANGE 28 EAST,  
N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 04-04-2007 Sheet 1 of 1 Sheets

## **Conditions of Approval Cave and Karst**

EA#: NM-520-07-0765

Lease #: NM-110829

**OGX Resources, LLC**

**Browning Federal Com No.1**

### **Cave/Karst Subsurface Mitigation**

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

#### **Lost Circulation:**

ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported.

Regardless of the type of drilling machinery used, if a void (bit drops) of four feet or more and circulation losses greater than 75 percent occur simultaneously while drilling in any cave-bearing zone, drilling operations will immediately stop and the BLM will be notified by the operator. The BLM will assess the consequences of the situation and work with operator on corrective actions to resolve the problem.

#### **Record Keeping:**

The Operator will track customary drilling activities, including the rate of penetration, pump pressure, weight on bit, bit drops, percent of mud returns, and presence of absence of cuttings returning to the surface. As part of customary record keeping, each detectable void or sudden increase in the rate of penetration not attributable to a change in the formation type should be documented and evaluated as it is encountered.

## CONDITIONS OF APPROVAL - DRILLING

**Operator's Name:** OGX RESOURCES, LLC  
**Well Name & No.** 1 – BROWNING FEDERAL COM  
**Location:** 1980' FSL & 1900' FEL – SEC 17 – T24S – R28E - EDDY  
**Lease:** NM-110829

.....

### I. DRILLING OPERATIONS REQUIREMENTS:

- A. The Bureau of Land Management (BLM) is to be notified a minimum of 4 hours in advance for a representative to witness:
1. Spudding well
  2. Setting and/or Cementing of all casing strings
  3. BOPE tests
- Eddy County call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822
- B. 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.
- C. If floor controls are required, (3M or Greater) 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.

### II. CASING:

- A. The 13-3/8 inch surface casing shall be set at 520 feet and cemented to the surface.
1. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
  2. Wait on cement (WOC) time for a primary cement job will be a minimum of 12 hours for a non-water basin, 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compression strength, whichever is greater. (This is to include the lead cement)
  3. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compression strength, whichever is greater.
  4. If cement falls back, remedial action will be done prior to drilling out that string.
- B. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is circulate cement to the surface. If cement does not circulate see A.1 thru 4.
- C. The minimum required fill of cement behind the 7 inch intermediate casing is tie back 200 feet into the 9-5/8 inch casing.

- D. The minimum required fill of cement behind the 4-1/2 inch production liner is **cement shall extend upward to the top of the liner.**
- E. 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 joint of the drill pipe will be installed prior to continuing drilling operations.

### **III. PRESSURE CONTROL:**

- A. 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.
- B. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M)** PSI.
- C. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 9-5/8 Intermediate casing shoe shall be **10000 (10M)** PSI.
- D. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
1. The tests shall be done by an independent service company.
  2. The results of the test shall be reported to the appropriate BLM office.
  3. 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.
  4. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi in accordance with API RP 53. 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.

### **IV. 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.

1. Recording pit level indicator to indicate volume gains and losses.
2. Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
3. Flow-sensor on the flow line to warn of abnormal mud returns from the well

LBabyak 5/17/07