N.M. Oil Cons. DIV-Dist. 2 1301 W. Grand Avenue **FORM APPROVED** /3 If earthen pits are used in (August 1999) OMB No. 1004-0136 association with the drilling of this Expires November 30, 2000 well, an OCD pit permit must be 5. Lease Serial No. DEPART obtained prior to pit construction. NMLC 063621-A(S/L) NMLC 063621 (BHL) 6. If Indian. Allottee or Tribe Name APPLICATION FOR PERMIT TO DRILL OR REENTER DRILL REENTER 1a. Type of Work: 7. If Unit or CA Agreement, Name and No. 8. Lease Name and Well No. Oil Well X Gas Well Other Single Zone 1b. Type of Well: Oatmeal 8 Fed Com No.2H Name of Operator 9. API Well No. 30 -015 EOG Resources, Inc. 3b. Phone No. (include area code) 3a. Address 10. Field and Pool, or Explorator P.O. Box 2267 Midland, TX 79702 (432) 686-3714 Sand Tank Bone Spring Location of Well (Report location clearly and in accordance with any State requirements.*) SUBJECT TO LIKE APPROVAL BY STATE 11. Sec., T., R., M., or Blk. And Survey Sec 8 T-18-S, R-30-E retery's Potesia 730' FNL & 2160 ' FEL (U/L B) At surface At proposed prod. Zone 1300' FSL & 2260' FEL (U/LO) 14. Distance in miles and direction from nearest town or post office 12. County or Parish 13. State 4 Mi. NW from Artesia NM 16. No. of Acres in lease 17. Spacing Unit dedicated to this well 15. Distance from proposed* 730 960 160 W/2E/2 location to nearest property or lease line, ft. (Also to nearest drlg. Unit line, if any) 18. Distance from proposed location* 19. Proposed Depth 20. BLM/BIA Bond No. on file TVD 8125' NM2308 to nearest well, drilling, completed applied for, on this lease, ft. TMD 11,046' 21. Elevations (Show whether DF, KDB, RT, GL, etc) 22. Approximate date work will start* 23. Estimated duration Gr 3526 9/25/2005 30 davs 24. Attachments The following completed in accordance with the requirements of Onshore Oil an 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 (see 2. A Drilling Plan. Item 20 above) 3. A Surface Use Plan (if the location is on National Forest Sytem Lands, the Operator certification. SUPO shall be filed with the appropriate Forest Service Office) 6. Such other site specific information and/or plans as may be required by the

authorized officer.

25. Signature		Name (Printed/Typed)	Date	
	Mike Usra	Mike Francis	8/15/2005	
Γitle .	Agent			

Approved by Signatored S. C. Rundell

Name (Printed/Typed) /s/ Linda S. C. Rundell

DEC 1 2 2005

Office

NM STATE OFFICE

Application approval does not warrant or certify the applicant holds legal or equitable title to those rightes in the subject operations theron 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 jurisidiction.

*(Instructions on reverse)

Carlies Carpadiod Wolco Reals

APPROVAL SUBJECT TO General requirements and Special Stipulations ATTACHED

WITNESS : 1134 CASING CEMENT JOB

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

State of New Mexico

Form C-102 Revised August 15, 2000

DISTRICT II

Energy, Minerals, and Natural Resources Department

Submit to Appropriate District Office

1301 W. Grand Avenue, Artesia, NM 88210

OIL CONSERVATION DIVISION

State Lease - 4 copies
Fee Lease - 3 copies

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

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

DISTRICT IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

AMENDED	KEPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

- 1	1 API Number	Pool Code	³ Pool Name	
			Sand Tank Bone Spring .	
	4 Property Code	OATME	Property Name AL "8" FED COM	6 Well Number 2H
l	⁷ OGRID No.	8	Operator Name	9 Elevation
	7377	EOG R	ESOURCES, INC.	3526'

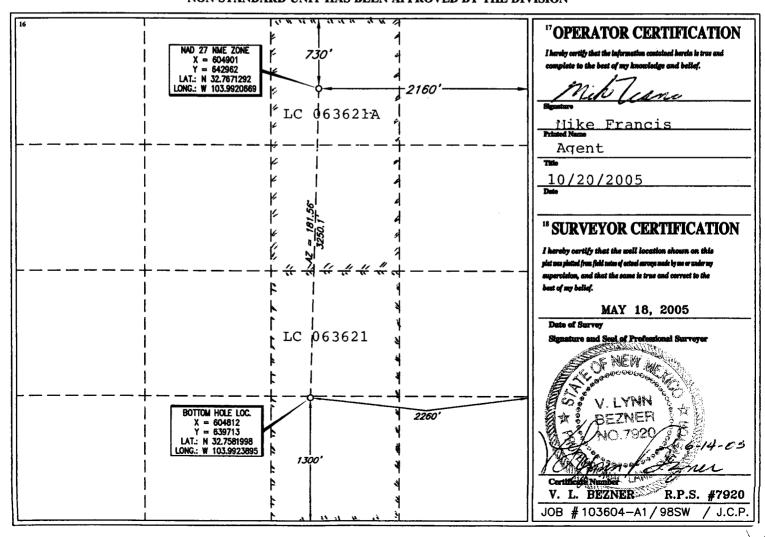
Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
В	8	18 SOUTH	30 EAST, N.M.P.M.		730'	NORTH	2160'	EAST	EDDY

¹¹ 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	8	18 SOUTH	30 EAST, N.M.P.M.		1300'	SOUTH	2260'	EAST	EDDY
12 Dedicated Acre 160	s 13 Jo	int or Infill	14 Consolidation Code	¹⁵ Order No	0.				-

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



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

State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-144 March 12, 2004 For drilling and production facilities, submit to appropriate NMOCD District Office. For downstream facilities, submit to Santa Fe

office

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tar Type of action: Registration of a pit	nk covered by a "general plan"? Yes No. No. or below-grade tank	de tank	
Operator: EOG Resources, Inc.	432 686-3714 e-		ancis@ esources.com
Address: P.O. Box 2267 Midland Tx. 7 Facility or well name: Outmeal 8 Ed Com 2H API#:	9702		
County: Latitude 32.7671292 Longitude 103	992669 NAD: 1927 DI 1983 T Surface On	mer Federal 🗹 State [☐ Private ☐ Indian ☐
20000		mer reactor <u>ma</u> conte	
Pit	Below-grade tank		
Type: Drilling Production Disposal D	Volume:bbl Type of fluid:		RECEIVED
Workover Emergency	Construction material:		
Lined Unlined 12	Double-walled, with leak detection? Yes I If not	, explain why not.	NOV 1 0 2005
Liner type: Synthetic Thickness 12 mil Clay □ Volume 7000bbl			OCU-ARTESIA
Depth to ground water (vertical distance from bottom of pit to seasonal high	Less than 50 feet	(20 points)	
water elevation of ground water.)	50 feet or more, but less than 100 feet	(10 points)	
	100 feet or more	(0 points)	·: ·
Wellhead protection area: (Less than 200 feet from a private domestic	Yes	(20 points)	
water source, or less than 1000 feet from all other water sources.)	No	(0 points)	
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more	(20 points) (10 points) (0 points)	
	Ranking Score (Total Points)		×
If this is a pit closure: (1) attach a diagram of the facility showing the pit's onsite offsite If offsite, name of facility date. (4) Groundwater encountered: No Yes If yes, show depth below diagram of sample locations and excavations.	(3) Attach a general description of remedial actio	n taken including reme	
I hereby certify that the information above is true and complete to the best of r been/will be constructed or closed according to NMOCD guidelines 23 a Date: II 9/05 Printed Name/Title Mike Francis Your certification and NMOCD approval of this application/closure does not rotherwise endanger public health or the environment. Nor does it relieve the o regulations.	general permit , or an (attached) alternative OC Signature	D-approved plan	ate ground water or
Approval: Field Sunervisor	de		
Printed Name/Title	Signature	·	

EOG RESOURCES, INC. Oatmeal 8 Fed Com No.2H

1. GEOLOGIC NAME OF SURFACE FORMATION:

Permian

2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

Rustler	500'
San Andres	3400'
!st Bone Spring	7600'
2 nd Bone Spring	8150
TD	8500

3. ESTIMATED DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS:

Upper Permian Sands	Above 250'	Fresh Water
Grayburg/San Andres	3000'	Oil
!st Bone Spring	7600	Oil
2 nd Bone Spring	8150	Oil

CASING PROGRAM

Hole Size	<u>Interval</u>	OD Casing	Weight Grade Jt. Cond. Type
14 3/4	0-650'	11 3/4"	42# H-40 ST&C
11"	0-3400'	8 5/8"	32# J-55 LT&C
7 7/8'	0-11,046	5 ½'	17# N80/S95 LT&C

Cementing Program:

11 3/4" Surface Casing: Cement to surface with 150 sx Prem Plus, 3%

Econolite, 2% Calcium Chloride, 0.25#/sx Flocele,

150 sx Prem Plus, 2% Calcium Chloride

8 5/8" Intermediate: Cement to surface with 500 sx Interfill C, .25#/sx

flocele, 200 sx Premium Plus, 1% Calcium Chloride

5 ½" Production: Cement w/450 sx Interfill C, + ¼ pps Flocele,

300sx Premium cement +100% Acid Soluble Additive +.6%Halad-344 +.8% Econlite +.2% HR-

55. This is designed to bring TOC to 3000'.

5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

(SEE EXHIBIT #1)

EOG RESOURCES, INC. Oatmeal 8 Fed Com No.2H

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a double ram-type (5000 psi WP) preventer and an annular preventer (5000-psi WP). Units will be hydraulically operated and the ram-type will be equipped with blind rams on top and drill pipe rams on bottom. All BOP's and accessory equipment will be tested in accordance with Onshore Oil & Gas order No. 2. EOG request authorization to use a 2M system, providing for an annular preventer to be used prior to the surface casing shoe and while drilling the intermediate section. Before drilling out of 1st intermediate casing, the ram-type BOP and accessory equipment will be tested to 5000/1000 psi and the annular to 3500/5000-psig pressure.

Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets.

6. TYPES AND CHARACTERISTICS OF THE PROPOSED MUD SYSTEM:

The well will be drilled to TD with a combination of brine, cut brine, and polymer/KCL mud system. The applicable depths and properties of this system are as follows:

		Wt Viscosii	ty Waterl	loss
<u>Depth</u>	<u>Type</u>	(PPG)	(sec)	(cc)
0-650'	Fresh Water /Gel	8.6-8.8	28-34	N.C.
650'-3400'	Brine Water	10.0 - 10.2	28-34	N.C.
3400'- TD	Cut Brine + Polymer/KCI	2 8.9 – 9.6	34-40	10-25

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the wellsite at all times.

7. AUXILIARY WELL CONTROL AND MONITORING EQUIPMENT:

- (A) A kelly cock will be kept in the drill string at all times.
- (B) A full opening drill pipe-stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.
- (C) A mud logging unit complete with H2S detector will be continuously monitoring drilling penetration rate and hydrocarbon shows from 5000' to TD.

EOG RESOURCES, INC. Oatmeal 8 Fed Com No.2H

Electric logging will consist of GR-Dual Induction Focused and GR-Compensated Density-Neutron from TD to intermediate casing with a GR-Compensated Neutron run from intermediate casing to surface and optional Sonic from TD to Intermediate casing.

Possible sidewall cores based on shows.

9. ABNORMAL CONDITIONS, PRESSURES, TEMPERATURES AND POTENTIAL HAZARDS:

The estimated bottom hole temperature (BHT) at TD is 175 degrees F with an estimated maximum bottom-hole pressure (BHP) at TD of 3500 psig. No hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area. No major loss circulation zones have been reported in offsetting wells.

10. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

The drilling operation should be finished in approximately one month. If the well is productive, an additional 30-60 days will be required for completion and testing before a decision is made to install permanent facilities.

EOG RESOURCES, INC. Oatmeal 8 Fed Com No.2H

SURFACE USE AND OPERATIONS PLAN

1. EXISTING ROADS:

Access to location will be made as shown on Exhibit #2

Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease.

2. PROPOSED ACCESS ROAD:

570' of new road is required. Exhibit #2a.

No turnouts necessary.

No culverts, low-water crossings are necessary. One cattle guard and gate will be necessary

Surfacing material consists of native caliche to be obtained from the nearest BLM-approved caliche pit. Any additional materials required will be purchased from the dirt contractor.

3. LOCATION OF EXISTING WELLS:

Exhibit #3 shows all existing wells within a one-mile radius of this well.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

There are no existing production facilities. If production is encountered, a temporary facility will be established on the drill pad, and if warranted, a production facility would be built at a later date in the immediate area of the drill pad location. If the well is productive, the flowline would also be located on the drill-pad site and no additional disturbance will occur.

5. LOCATION AND TYPE OF WATER SUPPLY:

Fresh water and brine water for drilling will come from commercial sources and transported to the well site over the roads as shown on Exhibit #2.

6. PLANS FOR RESTORATION OF THE SURFACE:

EOG RESOURCES, INC. Oatmeal 8 Fed Com No.2H

After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Location will be cleaned of all trash and junk to leave the well in an aesthetically pleasing condition as possible.

Any unguarded pits containing fluid will be fenced until they are dry and back filled.

After abandonment of the well, surface restoration will be in accordance with current federal laws and regulations. Location will be cleaned, and the well pad removed to promote vegetation and disposal of human waste will be complied with. Trash, waste paper, garbage and junk will be hauled to an approved disposal site in an enclosed trash trailer.

All trash and debris will be removed from the well site within 30 days after finishing drilling and/or completion operations.

ANCILLARY FACILITIES:

No airstrip, campsite, or other facilities will be built.

WELL SITE LAYOUT:

Exhibit #4 shows the relative location and dimensions of the well pad.

EOG RESOURCES, INC. Oatmeal 8 Fed Com No.2H

OTHER INFORMATION:

The area around the well site is grassland and the topsoil is duned and sandy. The vegetation is native scrub grasses with abundant oakbrush, sagebrush, yucca, and prickly pear.

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 presently 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 EOG Resources, Inc. and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

Craig Young
Drilling Manager

Date 8/16/2005

EOG RESOURCES, INC. Oatmeal 8 Fed Com No.2H

ATTACHMENT TO EXHIBIT #1

- 1. Wear ring to be properly installed in head.
- 2. Blow out preventer and all fittings must be in good condition, 5000 psi W.P. minimum. Exhibit #1.
- 3. All fittings to be flanged
- 4. Safety valve must be available on rig floor at all times with proper connections, valve to be full bore 5000 psi W.P. minimum.
- 5. All choke and fill lines to be securely anchored especially ends of choke lines.
- 6. Equipment through which bit must pass shall be at least as large as the diameter of the casing being drilled through.
- 7. Kelly cock on kelly.
- 8. Extension wrenches and hand wheels to be properly installed.
- 9. Blow out preventer control to be located as close to driller's position as feasible.
- 10. Blow out preventer closing equipment to include minimum 40-gallon accumulator, two independent sources of pump power on each closing unit installation, and meet all API specifications.

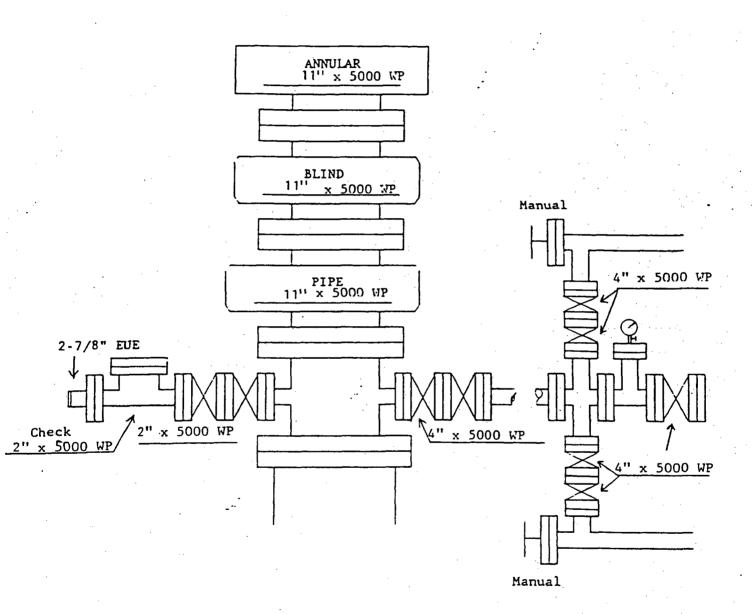


Exhibit 1

CONDITIONS OF APPROVAL - DRILLING

Well Name & No.

2H - OATMEAL 8 FEDERAL COM

Operator's Name:

EOG RESOURCES, INC.

Location:

730' FNL & 2160' FEL – SEC 8 – T18S – R30E - EDDY COUNTY (SHL)

1300' FSL & 2260' FEL - SEC 8 - T18S - R30E - EDDY COUNTY (BHL)

Lease:

LC-063621

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Roswell Field Office, 2909 West Second St., Roswell NM 88201, (505) 627-0272 for wells in Chaves and Roosevelt Counties; the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 234-5909 or (505) 361-2822 (After hours) - for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:

- A. Spudding
- B. Cementing casing: 11-3/4 inch 8-5/8 inch 5-1/2 inch
- C. BOP tests
- 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. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.
- 4. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.
- 5. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.
- 6. Gamma-Ray/Neutron logs shall be run from the base of the Salado Formation to the surface; cable speed not to exceed 30 feet per minute.

II. CASING:

- 1. The 11-3/4 inch surface casing shall be set at 360 feet, below usable water and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.
- 2. The minimum required fill of cement behind the <u>8-5/8</u> inch salt protection casing is <u>cement shall be</u> <u>circulated to the surface.</u>
- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is cement shall extend upward a minimum of 500 feet above the uppermost hydrocarbon bearing interval.

III. PRESSURE CONTROL:

- 1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 11-3/4 inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.
- 2. Minimum working pressure of the blowout preventer and related equipment (BOPE) for the surface and intermediate casing shall be <u>2000</u> psi. Minimum working pressure of the blowout preventer and related equipment (BOPE) below the **8-5/8** inch casing shall be <u>3000</u> psi.
- 3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.
- The tests shall be done by an independent service company.
- The results of the test shall be reported to the appropriate BLM office.
- Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
- Testing must be done in a safe workman-like manner. Hard line connections shall be required.