

## District I

1625 N. French Dr., Hobbs, NM 88240

## District II

1301 W. Grand Avenue, Artesia, NM 88202

## 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 ResourcesOil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-101

May 27, 2004

Submit to appropriate District Office

☐ AMENDED REPORTMonth - Year  
APR - 5 2007  
OCD - ARTESIA, NM

## APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

<sup>1</sup> Operator Name and Address Hanson Operating Company, Inc. P. O. Box 1515, Roswell, NM 88202-1515		<sup>2</sup> OGRID Number 9974
<sup>3</sup> Property Code 004992	<sup>4</sup> Property Name McBride State	<sup>5</sup> API Number 30 - 005-62798
<sup>9</sup> Proposed Pool 1 Diablo Wolfcamp		<sup>10</sup> Proposed Pool 2 #3

<sup>7</sup> 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	28	10S	27E		1675'	North	2310'	East	Chaves

<sup>8</sup> Proposed 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
---------------	---------	----------	-------	---------	---------------	------------------	---------------	----------------	--------

## Additional Well Information

<sup>11</sup> Work Type Code P	<sup>12</sup> Well Type Code G	<sup>13</sup> Cable/Rotary R	<sup>14</sup> Lease Type Code S	<sup>15</sup> Ground Level Elevation 3810' GR
<sup>16</sup> Multiple N	<sup>17</sup> Proposed Depth 5950'	<sup>18</sup> Formation Wolfcamp	<sup>19</sup> Contractor	<sup>20</sup> Spud Date 4/16/2007
Depth to Groundwater		Distance from nearest fresh water well		Distance from nearest surface water
Pit: Liner: Synthetic <input checked="" type="checkbox"/> 1/2" mils thick Clay <input type="checkbox"/> Pit Volume: _____ bbls Drilling Method: Closed-Loop System <input type="checkbox"/> Fresh Water <input type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				

<sup>21</sup> Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
20"	16"		30'	Redimix	Surface
14 3/4"	10 3/4"	40.5#	920'	695	Surface
9 5/8"	7"	23# - 26#	6348'	1900	Surface

<sup>22</sup> Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Propose to recomplete and test as follows:

1. MIRU. Install BOP.
2. Drill out plugs set at surface to 60', 814' - 964', 2493' - 2634', 4544' - 4744', 5474' - 5624'. Drill out to 5950'.
3. Circulate hole clean with 250 barrels of powdered 2% KCL water.
4. Run gamma ray log and collar locator to correlate depth.
5. Perforate Wolfcamp formation with 37 holes from 5572' - 5900'.
6. Acidize with 4,200 gallons acid. Swab test.
7. If productive, place on production. If non-productive, evaluate up-hole potential.

Work only, NSL required to produce.

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Signature:

Carol J. Smith

Printed name: Carol J. Smith

Title: Production Analyst

E-mail Address: hanson@dfn.com

Date: 4/4/2007

Phone: 505-622-7330

## OIL CONSERVATION DIVISION

Approved by:

BRYAN G. ARRANT  
DISTRICT II GEOLOGIST

Title:

Approval Date: APR 10 2007

Expiration Date: APR 10 2008

Conditions of Approval Attached ☒

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



State of New Mexico  
Minerals & Natural Resources Department  
WATER CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised October 12, 2005  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies



☐ AMENDED REPORT

### WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number <b>30-005-62798</b>	<sup>2</sup> Pool Code <b>76053</b>	<sup>3</sup> Pool Name <b>Diablo Wolfcamp</b>
<sup>4</sup> Property Code <b>004992</b>	<sup>5</sup> Property Name <b>McBride State</b>	<sup>6</sup> Well Number <b>#3</b>
<sup>7</sup> OGRID No. <b>009974</b>	<sup>8</sup> Operator Name <b>Hanson Operating Company, Inc.</b>	<sup>9</sup> Elevation <b>3810' GR</b>

#### <sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<b>G</b>	<b>28</b>	<b>10 South</b>	<b>27 East</b>		<b>1675</b>	<b>North</b>	<b>2310</b>	<b>East</b>	<b>Chaves</b>

#### <sup>11</sup> 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

<sup>12</sup> Dedicated Acres <b>320</b>	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> 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.

28				

#### <sup>17</sup> OPERATOR CERTIFICATION

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

*Carol J. Smith* 4/4/2007  
Signature Date

Carol J. Smith  
Printed Name

#### <sup>18</sup> 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.

September 22, 1990

Date of Survey

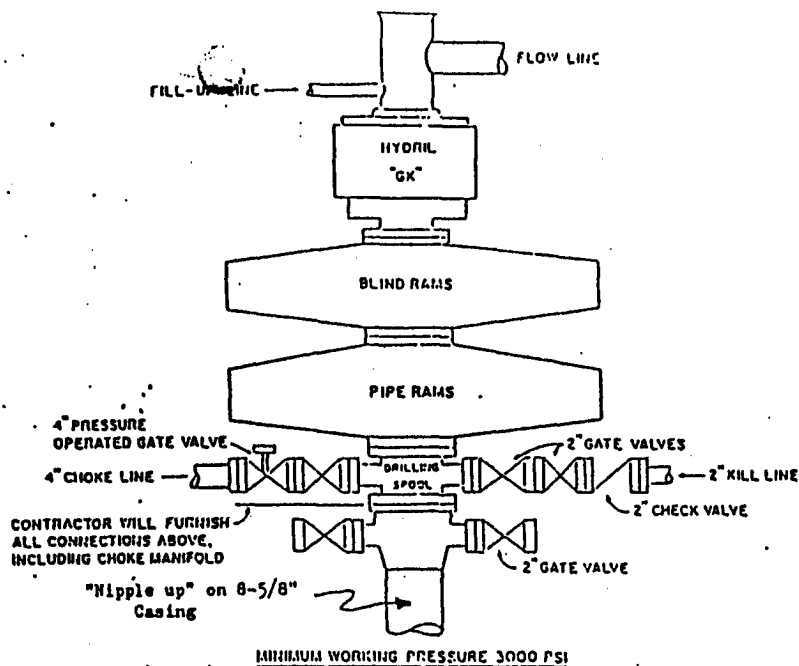
Signature and Seal of Professional Surveyor:

Refer to Original Plat

P. R. Patton, #8112

Certificate Number

28				



#### CONTRACTED TO FURNISH

1. ALL EQUIPMENT ABOVE CASING HEAD HOUSING INCLUDING CHOKER MANIFOLD.
2. INDEPENDENT AUTOMATIC ACCUMULATOR 3000 PSI WP.
3. B.O.P. CONTROLS TO BE LOCATED NEAR DRILLER'S POSITION AND AT SAFE DISTANCE FROM THE WELL.
4. SPARE SET PIPE RAMS TO FIT PIPE IN USE.

#### COMPANY TO FURNISH

1. WELLHEAD EQUIPMENT.
2. WEAR BUSHING, IF REQUIRED.

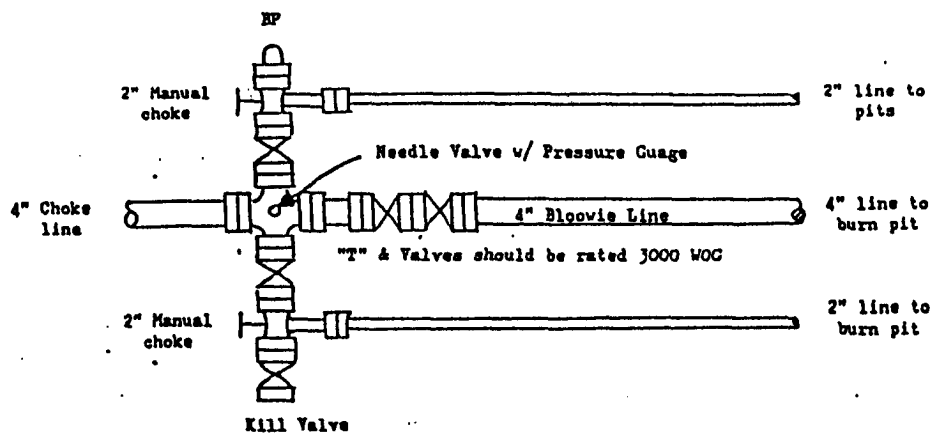
#### GENERAL NOTES

1. ALL VALVES, PIPING, FLANGES ETC. MUST HAVE MINIMUM WORKING PRESSURE EQUAL TO WORKING PRESSURE OF PREVENTERS. VALVES MUST BE OF THE FULL OPENING TYPE.
2. CONTROLS TO BE OF STANDARD DESIGN AND EACH MARKED SHOWING OPEN AND CLOSED POSITION.
3. CHOKER MANIFOLD AS SHOWN IN APP. 18 AND 19 REPLACEMENT PARTS AND WRENCHES TO BE CONVENIENTLY LOCATED FOR IMMEDIATE USE.
4. ALL VALVES TO BE EQUIPPED WITH HANDWHEELS.
5. CHOKER LINES MUST BE SUITABLY ANCHORED.
6. DEVIATIONS FROM THIS DRAWING MAY BE MADE ONLY WITH THE PERMISSION OF THE COMPANY.

#### MINIMUM BLOWOUT PREVENTER REQUIREMENTS

##### NORMAL PRESSURE SERVICE

#### CHOKER MANIFOLD SETUP



The above Manifold Hookup Design will meet minimum requirement by the Operator. Drilling Contractor to supply choke line and choke manifold. Operator to supply downstream lines from manifold assembly to pits.

H<sub>2</sub>S CONTINGENCY PLAN  
FORM C-101 APPLICATION FOR PERMIT TO DRILL  
HANSON OPERATING COMPANY, INC.  
McBRIDE STATE #3  
1675' FNL & 2310' FEL  
SECTION 28-10S-30E  
CHAVES COUNTY, NEW MEXICO

Hydrogen Sulfide is not typically encountered in the Wolfcamp formation in this area. However, appropriate precautions will be taken as outlined below:

- A. All personnel, whether regularly assigned, contracted or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations:
  - 1. The hazards and characteristics of hydrogen sulfide (H<sub>2</sub>S).
  - 2. The proper use and maintenance of personal protective equipment and life support systems.
  - 3. The proper use of H<sub>2</sub>S detectors, alarms, warning systems, briefing areas, evacuation procedures and prevailing winds.
  - 4. The proper techniques for first aid and rescue procedures.
- B. In addition, supervisory personnel will be trained in the following areas:
  - 1. The effects of H<sub>2</sub>S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
  - 2. The corrective action and shut-in procedures when drilling or reworking a well, and blowout prevention and well control procedures.
  - 3. The contents and requirements of the H<sub>2</sub>S Drilling

Operations Plan and the Public Protection Plan.

4. An initial training session will be held prior to encountering a known or probable H<sub>2</sub>S zone (within 3 days or 500 feet) with weekly H<sub>2</sub>S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H<sub>2</sub>S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the wellsite. All personnel will be required to carry documentation verifying that they have received proper training.
- C. All H<sub>2</sub>S safety equipment and systems will be installed, tested and operational when drilling reaches a depth of 500 feet above or three days prior to penetrating the first zone containing or reasonably expected to contain H<sub>2</sub>S.
- D. Well Control Equipment shall include the following:
  1. Flare line with electronic igniter or continuous pilot.
  2. Choke manifold with a minimum of one remote choke.
  3. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
  4. Auxiliary equipment to include annular preventer, mud-gas separator, rotating head and flare run with flares.
- E. Protective equipment for essential personnel shall include the following:
  1. Pressure-Demand type Self Contained Breathing Apparatus (SCBA) 30 minute units located in the dog house and at briefing areas, as indicated on the wellsite diagram.
- F. H<sub>2</sub>S detection and monitoring equipment shall include the following:
  1. Two portable H<sub>2</sub>S monitors positioned on location for best coverage and response. The units shall have warning lights

and audible sirens in the event H<sub>2</sub>S levels of 20 ppm are detected.

2. One portable SO<sub>2</sub> monitor positioned near flare line.

G. Visual warning systems shall include the following:

1. Wind direction indicators at entrance to wellpad and on drilling rig.
2. Caution/Danger signs shall be posted on roads providing direct access to location. Signs shall be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate.

**Arrant, Bryan, EMNRD**

---

**From:** Carol [hanson@dfn.com]  
**Sent:** Tuesday, April 10, 2007 10:54 AM  
**To:** Arrant, Bryan, EMNRD  
**Subject:** RE: McBride State # 3/API # 30-005-62798

Bryan,

Please find attached the requested H2S Contingency Plan.

As per our discussion, I am working with Santa Fe to file the NSL.

Upon your approval, we would like to move in as soon as possible to start drilling out the plugs. We have a rig available today.

If you have any questions, please let me know.

Thanks,  
Carol Smith  
Production  
505-622-7330

---

**From:** Arrant, Bryan, EMNRD [mailto:bryan.arrant@state.nm.us]  
**Sent:** Monday, April 09, 2007 9:11 AM  
**To:** Hanson@dfn.com  
**Cc:** Brooks, David K., EMNRD; Ezeanyim, Richard, EMNRD  
**Subject:** McBride State # 3/API # 30-005-62798

Dear Carol Smith or To Whom It May Concern:

In order to further my review in the above noted well, please submit the following:

The NSL # approval from Santa Fe for a non-standard location for a Wolfcamp gas well recompletion.

A h2s well contingency plan that meets the requirements of NMOCD Rule 118.  
If in your review such a plan is no required per/NMOCD Rule 118,  
please submit a letter of statement.

Yours truly,

Bryan G. Arrant  
District II Geologist  
NMOCD-Artesia  
505-748-1283 ext. 103

CC: Well file

4/10/2007

Confidentiality Notice: This e-mail, including all attachments is for the sole use of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited unless specifically provided under the New Mexico Inspection of Public Records Act. If you are not the intended recipient, please contact the sender and destroy all copies of this message. -- This email has been scanned by the Sybari - Antigen Email System.

---

This inbound email has been scanned by the MessageLabs Email Security System.

---