

## 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

NOV 13 2007

OCD-ARTESIA



Form C-101

May 27, 2004

Submit to appropriate District Office

☐ AMENDED REPORT

## 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 303237	<sup>3</sup> Property Name Hanlad AKZ State	<sup>3</sup> API Number 30 - 005-61493
<sup>9</sup> Proposed Pool 1 Palma Mesa; Penn		<sup>10</sup> Proposed Pool 2 Palma Mesa; Wolfcamp 97413

<sup>7</sup> Surface Location

UL or lot no M	Section 13	Township 8S	Range 27E	Lot Idn	Feet from the 660'	North/South line South	Feet from the 660'	East/West line West	County Chaves
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<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
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## 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 3936' GR
<sup>16</sup> Multiple N	<sup>17</sup> Proposed Depth 6300'	<sup>18</sup> Formation Cisco/Wolfcamp	<sup>19</sup> Contractor	<sup>20</sup> Spud Date 11/26/2007
Depth to Groundwater		Distance from nearest fresh water well		Distance from nearest surface water
Pit: Liner: Synthetic <input type="checkbox"/> _____ mls 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
17 1/4"	16"	54#	47'	4 yards	Circulated
12 1/2"	8 5/8"	24#	1400'	700	Circulated
7 7/8"	4 1/2"	10.5#	6800'	650	4535'
	2 3/8"		6280'		

<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 recompleat and test the Cisco Limestone and Wolfcamp formations as follows:

1. MIRU pulling unit and install BOP. Pull tubing.
2. Set RBP at 6300' to isolate existing perms at 6327'-6411'.
3. Perforate Cisco Limestone formation at 6146'-6264' with 50 holes. Acidize with 5,000 gallons 20% acid.
4. Perforate Lower Wolfcamp at 5812'-5944' with 40 holes. Acidize with 4,000 gallons 20% acid.
5. Perforate Middle Wolfcamp at 5666'-5736' with 35 holes. Acidize with 3,000 gallons 20% acid.
6. Perforate Upper Wolfcamp at 5584'-5626' with 30 holes. Acidize with 3,000 gallons 20% acid.
7. Place on production. Test and evaluate.

DHC required to produce well Work only approval

<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 <input checked="" type="checkbox"/> , a general permit <input type="checkbox"/> , or an (attached) alternative OCD-approved plan <input type="checkbox"/>		OIL CONSERVATION DIVISION	
Signature: <i>Carol J. Smith</i>		Approved by: <b>BRYAN G. ARANT</b>	
Printed name: Carol J. Smith		Title: <b>DISTRICT II GEOLOGIST</b>	
Title: Production Analyst		Approval Date: <b>NOV 30 2007</b>	Expiration Date: <b>NOV 30 2008</b>
E-mail Address: hanson@dfn.com			
Date: 11/8/2007	Phone: 505-622-7330	Conditions of Approval Attached <input type="checkbox"/>	

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State of New Mexico  
Energy, Minerals & Natural Resources Department  
OIL 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 30-005-61493	<sup>2</sup> Pool Code 97413	<sup>3</sup> Pool Name Palma Mesa Wolfcamp
<sup>4</sup> Property Code 303237	<sup>5</sup> Property Name Hanlad AKZ State Com	<sup>6</sup> Well Number #1
<sup>7</sup> OGRID No. 009974	<sup>8</sup> Operator Name Hanson Operating Company, Inc.	<sup>9</sup> Elevation 3936' GR

<sup>10</sup> Surface Location


UL or lot no. M	Section 13	Township 8 South	Range 27 East	Lot Idn	Feet from the 660	North/South line South	Feet from the 660	East/West line West	County Chaves
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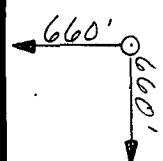
<sup>11</sup> Bottom Hole Location If Different From Surface

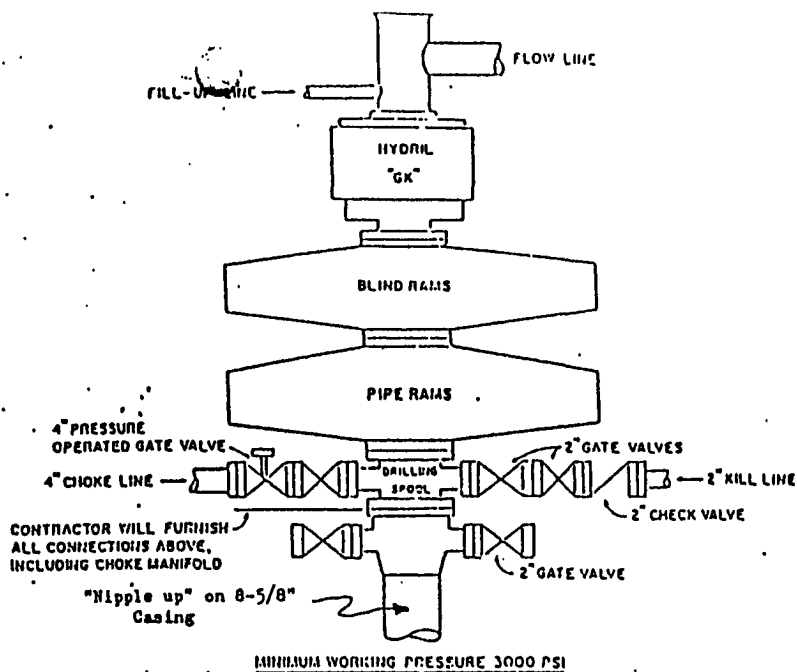
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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<sup>12</sup> Dedicated Acres 320	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

16				<sup>17</sup> OPERATOR CERTIFICATION <i>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</i>  Signature Date 08/2007 Carol J. Smith Printed Name
				<sup>18</sup> SURVEYOR CERTIFICATION <i>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.</i> March 19, 1982 Date of Survey Signature and Seal of Professional Surveyor Refer to Original Plat John Jaquess Certificate Number





#### CONTRACTOR TO FURNISH

1. ALL EQUIPMENT ABOVE CASING HEAD HOUSING INCLUDING CHOKE MANIFOLD.
2. INDEPENDENT AUTOMATIC ACCUMULATION 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.

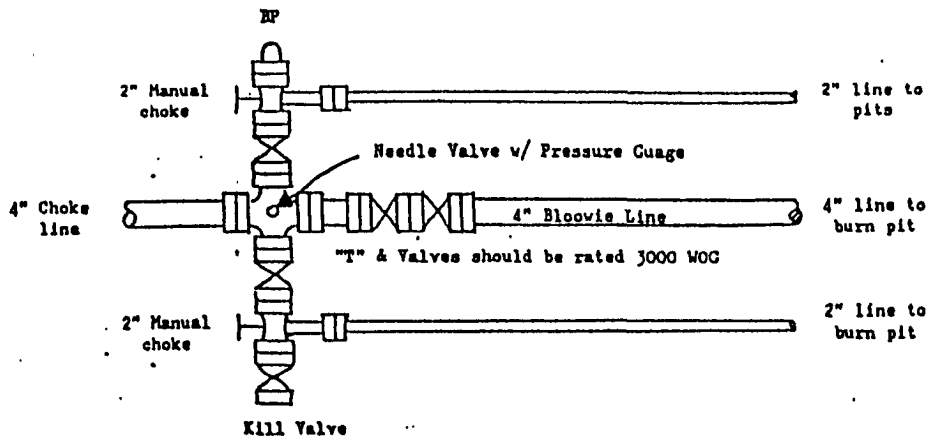
#### GENERAL NOTES

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. CHOKE MANIFOLD AS SHOWN IN APP. 18 AND 19 REPLACABLE PARTS AND WRENCHES TO BE CONVENIENTLY LOCATED FOR IMMEDIATE USE.
4. ALL VALVES TO BE EQUIPPED WITH HANDWHEELS.
5. CHOKE 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

#### CHOKE MANIFOLD SETUP



The above Manifold Backup 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.

# WELLBORE DIAGRAM

WELL NAME Hanlad AKZ State #1 FIELD Palma Mesa  
 LOCATION 660' FSL & 660' FWL, M-Section 13-8S-27E, Chaves County, New Mexico  
 GL 3936' ZERO KB  
 SPUD DATE 4/1/1982 COMPLETION DATE 7/9/1982  
 COMMENTS: API #30-005-61943

## CASING PROGRAM

8 5/8" 24# J-55 ST&C	1400'
4 1/2" 15.5# J-55 ST&C	6800'

12 1/2" Hole

8 5/8" at 1400' w/700 sx cement (Circ)

BEFORE

TOC at 4535' by CBL

7 7/8" Hole

Penn  
 Perfs: 6327'-6411' 18 holes

CIBP at 6500'

4 1/2" at 6800' w/650 sx cement

TD 6800'

Not to Scale  
 11/8/2007

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12 1/2" Hole

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AFTER

7 7/8" Hole

TOC at 4535' by CBL

### Wolfcamp

Perfs: 5584'-5626' 30 holes

Perfs: 5666'-5736' 35 holes

Perfs: 5812'-5944' 40 holes

### Cisco Limestone

Perfs: 6146'-6264' 50 holes

RBP at 6300'

### Penn

Perfs: 6327'-6411' 18 holes

CIBP at 6500'

4 1/2" at 6800' w/650 sx cement

TD 6800'

Not to Scale

11/8/2007