

District I  
1625 N French Dr., Hobbs, NM 88240  
Phone (575) 393-6161 Fax (575) 393-0720  
District II  
811 S First St., Artesia, NM 88210  
Phone (575) 748-1283 Fax (575) 748-9720  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone (505) 334-6178 Fax (505) 334-6170  
District IV  
1220 S St Francis Dr., Santa Fe, NM 87505  
Phone (505) 476-3460 Fax (505) 476-3462

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-101  
Revised August 1, 2011

Permit

ROVD JAN 24 '12  
OIL CONSV. DIV.  
DIST. 3

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

<sup>1</sup> Operator Name and Address Dugan Production Corp. 709 East Murray Drive, Farmington, New Mexico 87401		<sup>4</sup> OGRID Number 006515
		<sup>3</sup> API Number 30-045- <b>35348</b>
<sup>5</sup> Property Code <b>34306</b>	<sup>6</sup> Property Name Federal I Com	<sup>7</sup> Well No 103S

**<sup>7</sup> Surface Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
M	12	29N	14W		1065	South	335	West	San Juan

**<sup>8</sup> Pool Information**

Harper Hill Fruitland Sand Pictured Cliffs and Basin Fruitland Coal
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**Additional Well Information**

<sup>9</sup> Work Type N	<sup>10</sup> Well Type G	<sup>11</sup> Cable/Rotary R	<sup>12</sup> Lease Type FEE	<sup>13</sup> Ground Level Elevation 5454-GL
<sup>14</sup> Multiple Yes	<sup>15</sup> Proposed Depth 1260	<sup>16</sup> Formation Pictured Cliffs	<sup>17</sup> Contractor Not Available	<sup>18</sup> Spud Date ASAP
Depth to Ground water 260-Feet		Distance from nearest fresh water well 3,350-Feet		Distance to nearest surface water 2,000-Feet

**<sup>19</sup> Proposed Casing and Cement Program**

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surface	12-1/4"	8-5/8"	24#	120-Feet	70-cf	Surface
Production	7"	5-1/2"	14#	1260-Feet	240-cf	Surface

**Casing/Cement Program: Additional Comments**

**Proposed Blowout Prevention Program**

Type	Working Pressure	Test Pressure	Manufacturer
9"-Double Ram	2,000-psi	2,200-psi	Townsend

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 ☐.

Printed name Kurt Faghrelius

Title VP-Land and Exploration

E-mail Address kfaghrelius@duganproduction.com

Date 1-16-2012

Phone 505-325-1821

**OIL CONSERVATION DIVISION**

Approved By

Title **SUPERVISOR DISTRICT # 3**

Approved Date **FEB 07 2012**

Expires **FEB 07 2014**

Conditions of Approval Attached

**HOLD C104 FOR NSL**

NOTIFY AZTEC OCD 24 HRS.  
PRIOR TO CASING & CEMENT

ca

FEB 07 2012

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State of New Mexico  
Energy, Minerals & Natural Resources Department

Form C-102  
Revised August 1, 2011

Submit one copy to  
Appropriate District Office

OIL CONSERVATION DIVISION  
1220 South St. Francis Drive  
Santa Fe, NM 87505

☐ AMENDED REPORT  
RCVD JAN 24 '12  
OIL CONS. DIV.

DIST. 3

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number <b>30-045-35348</b>	*Pool Code 78160 / 71629	*Pool Name HARPER HILL FRUITLAND SAND PICTURED CLIFFS / BASIN FRUITLAND COAL
*Property Code <b>34306</b>	*Property Name FEDERAL I COM	*Well Number 1035
*OGRID No 006515	*Operator Name DUGAN PRODUCTION CORPORATION	*Elevation 5454'

<sup>10</sup> Surface Location

UL or lot no M	Section 12	Township 29N	Range 14W	Lot Idn	Feet from the 1065	North/South line SOUTH	Feet from the 335	East/West line WEST	County SAN JUAN
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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
<sup>12</sup> Dedicated Acres 157.67 Acres (SW/4) - PC 317.67 Acres (W/2) - FC					<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

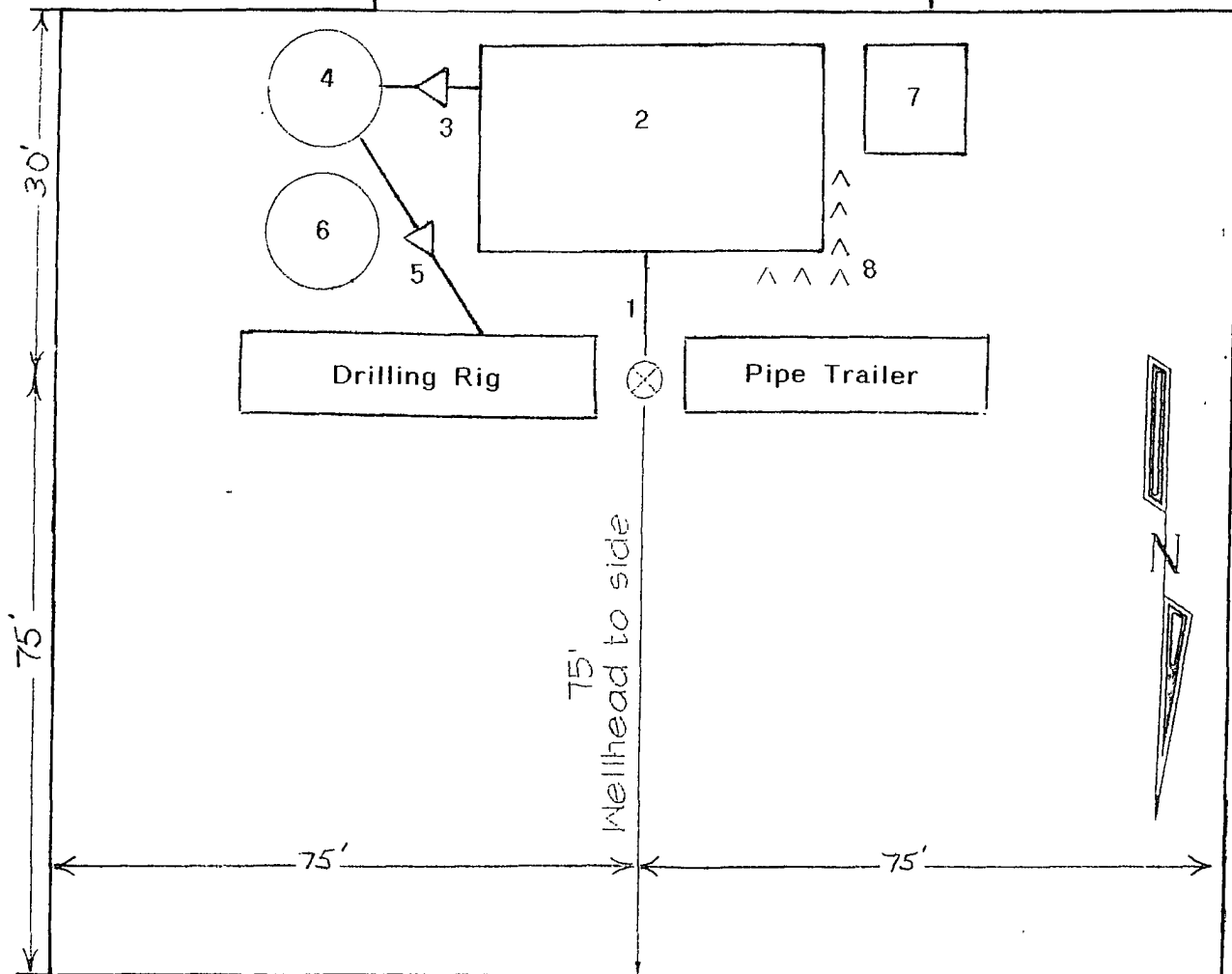
<sup>16</sup>

2641.32'	2642.16'	2426.16'	335	1065'	XTO FEE	LOT 7	LOT 2	LOT 1	LOT 3	5287.92'	2598.42'	2556.84'	<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  <i>Kurt Fagrelus</i> 1-12-2012 Signature Date Kurt Fagrelus Printed Name kfagrelus@duganproduction.com E-mail Address

# Ia. Closed Loop Drilling System

## Dugan Production Corp. Closed Loop Drilling Mud System Federal I Com #103S

Sec. 12, T29N, R14W, NMPM  
1065' FSL & 335' FWL  
San Juan County, New Mexico



Closed Loop Drilling System

1. Flow line from well head to open-top steel tank
2. Open-top steel tank with internal baffles (approx. 40-ft. long by 10-ft. wide and 4-ft deep, 285-bbbls.) set in an un-lined depression (approx. 45-ft. long by 12-ft wide and 3-ft deep).
3. Transfer pump to move drilling fluid from open-top steel tank to circulation / storage tank.
4. 400-bbbls circulation / storage tank.
5. Transfer pump to move drilling fluid from circulation / storage tank to drilling rig circulation system
6. 400-bbbls fresh water storage tank
7. 200—400-bbbls. steel flow-back tank for collection of circulated cement returns and flow-back after frac
8. 1-foot tall berm around perimeter of depression to prevent surface run-off water from entering depression