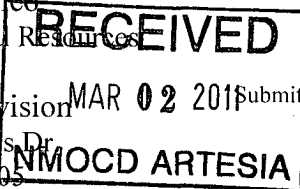


District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

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



Form C-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 Cimarex Energy Co. of Colorado 600 N. Marienfeld, Ste. 600 Midland, TX 79701 ✓		<sup>2</sup> OGRID Number 162683 ✓
		<sup>3</sup> API Number 30-015- 38599
<sup>4</sup> Property Code 38550 ✓	<sup>5</sup> Property Name Spiketail SWD ✓	<sup>6</sup> Well No. 001 ✓
<sup>9</sup> Proposed Pool 1		<sup>10</sup> Proposed Pool 2

**7 Surface Location**

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	5	17S	29E		2610	South	1980	West	Eddy ✓

**8 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 New Well ✓	<sup>12</sup> Well Type Code SWD ✓	<sup>13</sup> Cable/Rotary	<sup>14</sup> Lease Type Code S ✓	<sup>15</sup> Ground Level Elevation 3638 GL ✓
<sup>16</sup> Multiple N ✓	<sup>17</sup> Proposed Depth 9400 ✓	<sup>18</sup> Formation Cisco/Canyon ✓	<sup>19</sup> Contractor N/A	<sup>20</sup> Spud Date When Approved
Depth to Groundwater		Distance from nearest fresh water well		Distance from nearest surface water
Pit: Liner: Synthetic <input type="checkbox"/> _____ mils thick Clay <input type="checkbox"/> Pit Volume: _____ bbls Drilling Method: _____				
Closed-Loop System <input checked="" type="checkbox"/> Flowback Tanks Fresh Water <input type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				

**21 Proposed Casing and Cement Program**

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17½	13¾	48	450	500	Circ
12¼	9¾	40	1200	470	Circ
8¾	7	26	9400	950	Circ

<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.

Drill Cisco/Canyon SWD well. Wells disposing into the SWD will be Cimarex operated Paddock/Blinbry wells in the area.

Injection interval will be 8850-9300. Acidize perms with 1500 gal 7½% acid. Packer to be set @ 8750 with 3½" 9.3# J55 tubing from 0-8750. See attached proposed WBD.

C-108 currently in progress at NMOCD Santa Fe.

<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: *Natalie Krueger*  
Printed name: Natalie Krueger

Title: Regulatory

E-mail Address: [nkrueger@cimarex.com](mailto:nkrueger@cimarex.com)

Date: March 1, 2011

Phone: 432-620-1936

**OIL CONSERVATION DIVISION**

Approved by: *Jacqueline*

Title: *Geologist*

Approval Date: 3/23/2011

Expiration Date: 3/23/2013

Conditions of Approval Attached ☐

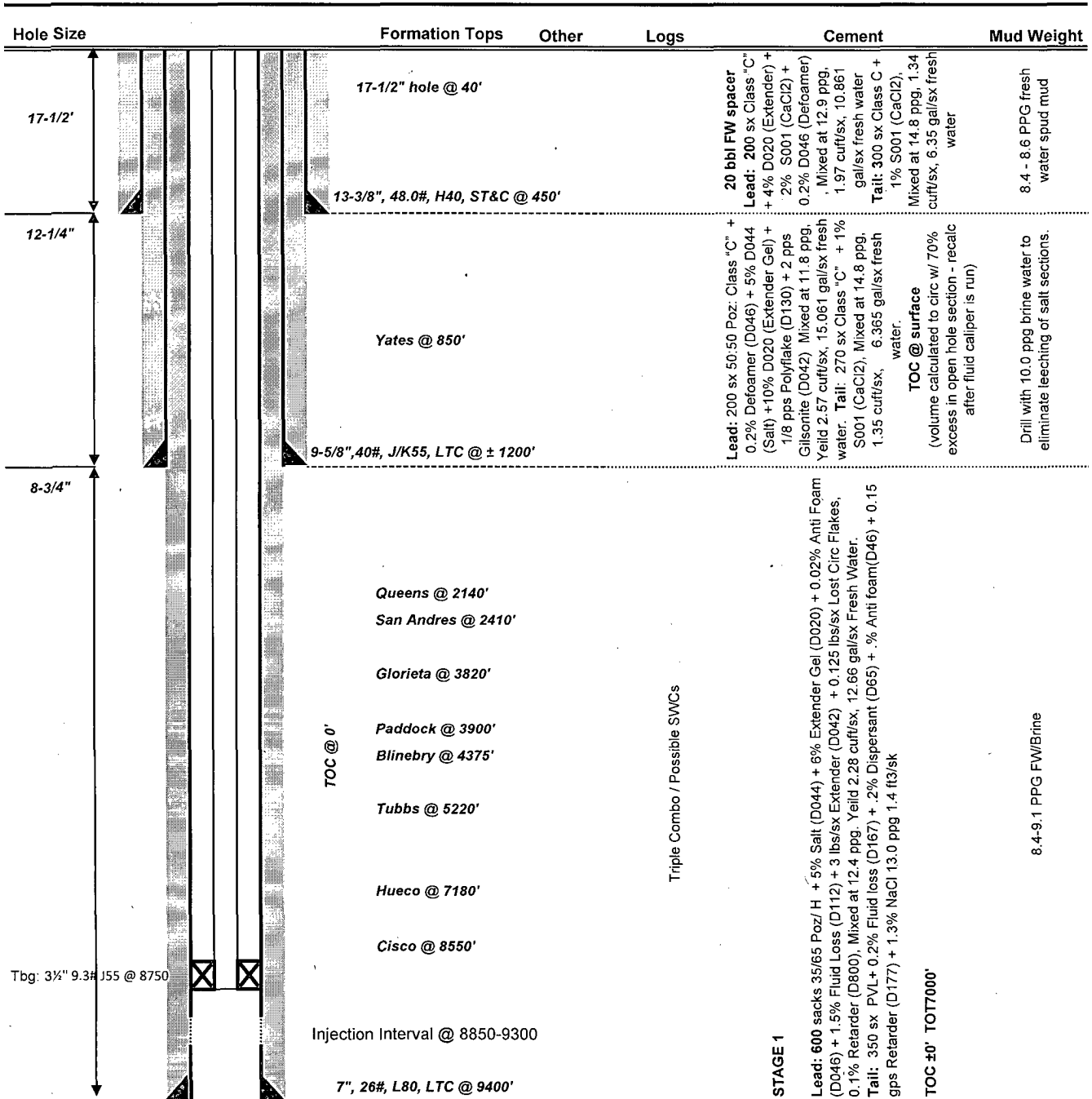


# **DRILLING PROGNOSIS** Cimarex Energy Company

8/23/2010

Well: **Spiketail SWD 1**  
Location: **Sec 5, T17S, R29E**  
County, State: **Eddy County, NM**  
Surface Location: **2310' FNL & 890' FEL**  
Wellhead: **Tms -13\_3/8" 3000 x 11\_3/4" SOW**  
**"A" 8\_5/8" SOW x 11" 3000**  
**"B" 11" 3000 x 7\_1/16" 5000**

Lse Serial #  
Field: **Loco Hills**  
Objective: **Cisco/Canyon**  
TVD/MD: **9400'**  
Tbg: **3-1/2"**



## **NOTES:**

Cement volumes for surface csg include a 100% excess in the open hole section. If drilling conditions deem necessary, fluid caliper hole and adjust volumes.

Cement volumes for intermediate csg include a 70% excess in the open hole section. If drilling conditions deem necessary, fluid caliper hole and adjust volumes. Csg set above the Yates, 20' into Tansill.

Cement volumes for production csg include a 25% excess in the open hole section. Adjust volumes after caliper + 25% excess.