New Mexico Energy, Minerals and Natural Resources Department

## Bill Richardson Governor

Joanna Prukop Cabinet Secretary Reese Fullerton Deputy Cabinet Secretary Mark Fesmire Division Director Oil Conservation Division



Administrative Order IPI-303 August 19, 2008

Chesapeake Operating, Inc. P.O. Box 18496 Oakahoma City, OK 73154-0496

Attention: Doug Rubick

## RE: Injection Pressure Increase West Teas (Yates-Seven Rivers) Unit Waterflood Project Lea County, New Mexico

Dear Mr. Rubick:

Reference is made to your request on behalf of Chesapeake Operating, Inc. (OGRID 147179) received by the Division on July 11, 2008 to increase the surface injection pressure on eight (8) wells within the West Teas (Yates-Seven Rivers) Unit Waterflood Project. This request is based upon step rate tests recently conducted on these wells. The results of the step rate tests for the West Teas (Yates-Seven Rivers) Unit Wells No. 443, 641, 912, 913, 921, 924, 941 and 945 indicate that an increase in the surface injection pressure for these wells is justified and will not result in the fracturing of the injection formation and confining strata.

These wells were first approved by the Division for injection with Administrative Order WFX-791. These wells were last approved by the Division for injection pressure with Administrative Order IPI-244.

It is our understanding that these wells will not take a sufficient volume of water at the present pressure limits and a higher pressure limits are needed for waterflood operations. Administrative Order IPI-303 Chesapeake Operating, Inc. August 19, 2008 Page 2 of 2

You are therefore authorized to increase the surface injection pressure on the following wells all located in Township 20 South, Range 33 East, NMPM, Lea County, New Mexico:

WELL NUMBER	SURFACE INJECTION PRESSURE
West Teas (Yates-Seven Rivers) Unit No. 443	1470 PSIG
API No. 30-025-35976, Unit I, Section 4	
West Teas (Yates-Seven Rivers) Unit No. 641	1804 PSIG
API No. 30-025-33144, Unit A, Section 16	·
West Teas (Yates-Seven Rivers) Unit No. 912	1752 PSIG
API No. 30-025-29971, Unit E, Section 9	
West Teas (Yates-Seven Rivers) Unit No. 913	1752 PSIG
API No. 30-025-29972, Unit L, Section 9	
West Teas (Yates-Seven Rivers) Unit No. 921	1522 PSIG
API No. 30-025-31896, Unit C, Section 9	
West Teas (Yates-Seven Rivers) Unit No. 924	1670 PSIG
API No. 30-025-36073, Unit F, Section 9	
West Teas (Yates-Seven Rivers) Unit No. 941	1310 PSIG
API No. 30-025-32217, Unit A, Section 9	
West Teas (Yates-Seven Rivers) Unit No. 945	1795 PSIG
API No. 30-025-36079, Unit H, Section 9	

The operator is responsible for ensuring injected waters do not migrate upward inside or outside of this casing and enter formations above the permitted injection interval.

This approval is subject to your being in compliance with all other Division rules, including but not limited to Division Rule 40.

The Division Director may rescind this injection pressure increase if it becomes apparent that the injected fluid is not being confined to the injection zone or is endangering any fresh water aquifers.

Sincerely.

Mark E. Fesmire, P.E. Director

cc: Oil Conservation Division – Hobbs File: IPI-244 File: WFX-791 File: Case No. 12272

Chesapeake's WTU Field

API	Well	State	Co.	State Co. Sec Range	e Legal Description	Upper Inj. Perf	Lower Inj. Perf	Orig. IP	2004 IPI	08 IPI Req
300253203	3002532032 WTU 433 NM	MN	LEA	4 033E	SL: S2 NW SE - 1650 FSL 1980 FEL	3,230	3,426	968	968	NA
300253597(	3002535976 WTU 443 NM	MN	<b>LEA</b>	4 033E	SL: S2 NE SE - 1855 FSL 660 FEL	3,157	3,217	631	NA	1470
300253314	3002533144 WTU 641 NM	MN	LEA	16 033E	SL: NE NE NE - 330 FNL 330 FEL	3,160	3,294	AN	NA	1804
300252997	3002529971 WTU 912 NM	MN	LEA	9 033E	SL: C SW NW - 1980 FNL 660 FWL	3,138	3,374	1200	1200	1752
3002529972	3002529972 WTU 913 NM	WN	LEA	9 033E	SL: C NW SW - 1980 FSL 660 FWL	3,114	3,239	903	903	1752
3002531896	3002531896 WTU 921 NM	MN	LEA	9 033E	SL: NE NE NW - 330 FNL 2310 FWL	3,147	3,409	998	998	1522
3002536073	3002536073 WTU 924 NM		LEA	9 033E	SL: SE SE NW - 2560 FNL 2210 FWL	3,038	3,233	1197	1197	1670
300253221	3002532217 WTU 941 NM	MN	<b>LEA</b>	9 033E	SL: NW NE NE	3,076	3,114	615	NA	1310
3002536075	3002536079 WTU 945 NM	MN	LEA	9 033E	9 033E  SL: SE SE NE - 2612 FNL 330 FEL	3,096	3,218	1200	1200	1795

Orig IP WFX-791 in 2003 2004 IPI IPI-244