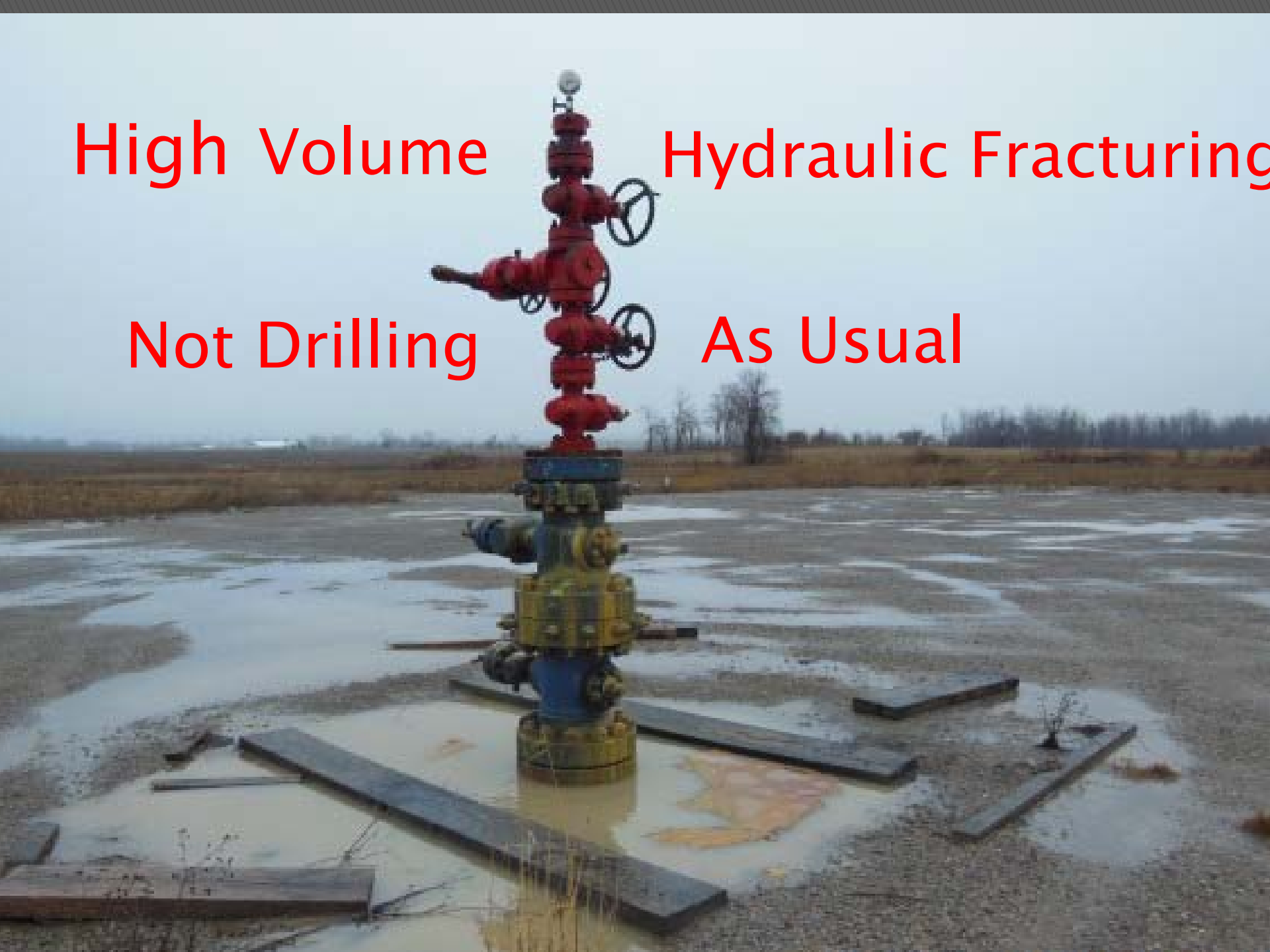


High Volume

Hydraulic Fracturing

Not Drilling

As Usual





Westerman Pad, Kalkaska County





Not Your Grandfather's Well Pad...



2010
State Pioneer Well Missaukee Co



Reasonable Doubt # 1:

Fed, State & Local Exemptions

Sloppy Operators

State Staffing and Budget Cuts





Uncapped water well on site.
Shultz Well, Sanilac County





Shultz Well chemical containers left on site >>

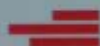


Beacon Energy: One Sloppy Operator >>>



State Richfield Site, Roscommon Co. 2/6/13 >>

Well was completed 11/25/12



devon Devon Energy
Production Company, L.P

Lease:	Schick 1-7HD
Well Name:	Schick 1-7HD
County:	Clare
Township:	Hamilton
MDEQ Permit #:	60525
API #:	2103560525
Location:	Lat: 44° 3' 23.687" N Long: -84° 42' 50.486" W

DEVON ENERGY EMERGENCY CONTACT #:

1-800-361-3377

03.06.2013 12:44



DESTOLIFE
CORPORATION

METAL FREE*

PRODUCT NO: 652713

Head Office: 2777 Stemmons Freeway Suite 1800 / Dallas, Texas 75207

Telephone (214) 631-6070 / Fax (214) 631-0047







Reasonable Doubt #2:

Record Breaking Water Withdrawals

Permanent Water Contamination

Permanent Removal from H₂O Cycle

...Cherries



State Excelsior 3-25 HD-1 Kalkaska Co >>

Michigan's World Record Holder: 21.5
million gallons



Encana's Westerman Well Plan B: One million >>
plus gallons of Kalkaska's municipal water at
\$2/1000 gallons. 5/31/13



Westerman Well: 1.7 million gallons H₂O >>>
Ready to Frac

Reasonable Doubt #3:

Unanswered Questions

Health & Safety

Cumulative Impacts





Airborne Silica Sand: Westerman Well, Kalkaska >>
Fracking in Progress, May 31, 2013



DEQ Permit Updates 10/1-5/12

CORRECTIONS:													
694	699	DENVER OIL DEVELOPMENT CO											
Drilling Unit													
<table border="1"> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </table>													
API WELLNO:	21-073-00694-00-00				TRUE VERTICAL DEPTH:								
WELL NAME:	ADAMS, R. 1				FORMATION: DUNDEE								
WELL TYPE:	DRY HOLE				CORRECTION DATE: 07/20/1999								
SURF OWNER:													
LOCATION:	QT	QT	QT	SEC	T	R	TOWNSHIP	COUNTY	FEET FROM SECTION LINE	FEET FROM DRLG UNIT LINE			
SL	SENESE			35	15N	3W	DENVER	ISABELLA	990 N 330 E				
COMMENTS:	WELL REMAINS PLC BECAUSE CONTAMINATION IS PRESENT AT SITE. BOND HAS BEEN CLAIMED. USER ID: JP												
1281	2482	THOMPSON L G											
Drilling Unit													
<table border="1"> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </table>													
API WELLNO:	21-129-01281-00-00				TRUE VERTICAL DEPTH:								
WELL NAME:	PRICE 1				FORMATION: DUNDEE								
WELL TYPE:	DRY HOLE				CORRECTION DATE: 07/21/1999								
SURF OWNER:													
LOCATION:	QT	QT	QT	SEC	T	R	TOWNSHIP	COUNTY	FEET FROM SECTION LINE	FEET FROM DRLG UNIT LINE			
SL	NWSWNE			31	22N	3E	CHURCHILL	OGEMAW	990 S 330 W				
COMMENTS:	WELL REMAINS ON OWL AS CATEGORY III DUE TO POSSIBLE GROUNDWATER CONTAMINATION . USER ID: JP												
18112	1311	LAKELAND OIL CORP											
Drilling Unit													
<table border="1"> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </table>													
API WELLNO:	21-051-18112-00-00				TRUE VERTICAL DEPTH:								
WELL NAME:	KOBETICH, EDITH ET AL L-2				FORMATION: DUNDEE								
WELL TYPE:	OIL WELL				CORRECTION DATE: 09/09/2002								
SURF OWNER:													
LOCATION:	QT	QT	QT	SEC	T	R	TOWNSHIP	COUNTY	FEET FROM SECTION LINE	FEET FROM DRLG UNIT LINE			
SL	SWNWNE			34	17N	2E	BENTLEY	GLADWIN	990 N 330 W	330 S 330 W			
COMMENTS:	WELL TO REMAIN PLC BECAUSE OF HYDROCARBON CONTAMINATION . WELL IS ON CATEGORY III ORPHAN WELL LIST. USER ID: JP												
12767	1520	MACCALLUM BYRON											
Drilling Unit													
<table border="1"> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </table>													
API WELLNO:	21-085-12767-00-00				TRUE VERTICAL DEPTH:								
WELL NAME:	LAKE COUNTY FARM 1				FORMATION: MONROE								
WELL TYPE:	DRY HOLE				CORRECTION DATE: 01/01/2006								
SURF OWNER:													
LOCATION:	QT	QT	QT	SEC	T	R	TOWNSHIP	COUNTY	FEET FROM SECTION LINE	FEET FROM DRLG UNIT LINE			
SL	SWSWNE			10	17N	11W	CHASE	LAKE	370 S 430 W				
COMMENTS:	CATEGORY II ON 2006 ORPHAN WELL LIST DUE TO GROUNDWATER CONTAMINATION . USER ID: JP												

Reasonable Doubt #4:

Waste Generation & Disposal

&

Michigan's Unique Geology





Fracking Flowback as Dust Control >>

Sunset Trail, Kalkaska



Leaked 135,000 Cubic Feet of H₂S on 12/24/11



Two Valves Failed; Leaked For More Than 4 Hrs >>

Reasonable Doubt # 5:

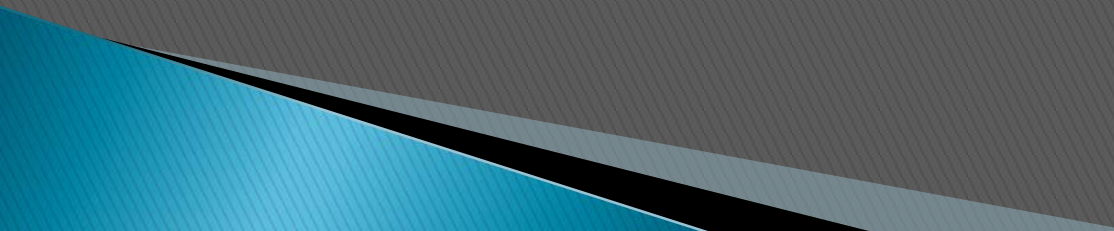
MNDR/MDEQ “Neutrality”

Oil and Gas Rules, Section 2, Part 615

Amended 2006:



“...it is accordingly the declared policy of the state...to foster the development of the industry along the most favorable conditions and with a view to the ultimate recovery of the maximum production of these natural products.”



Michigan's Regs:

Up to the Task?

Flowback containment

Baseline Water Testing

WWAT: paper tiger?

“Instructions” aren’t binding

Nationwide Insurance:

“From an underwriting standpoint, we do not have a comfort level with the unique risks associated with the fracking process to provide coverage at a reasonable price.”



Christensen Well, Ionia County: >>
Southwest Michigan's Future?



You can't frac in a vacuum

