



United States Department of the Interior  
BUREAU OF LAND MANAGEMENT  
Washington, D.C. 20240  
<http://www.blm.gov>



NOV 07 2011

NOV 17 2011

The Honorable Edward J. Markey  
National Resources Committee  
House of Representatives  
Washington, DC 20515

Dear Representative Markey:

The Bureau of Land Management (BLM) is providing additional information as a follow-up to your February 28, 2011, letter regarding hydraulic fracturing and other issues relating to the development of oil and gas resources on BLM lands.

Enclosed are the answers to 2d and 4. If you have additional questions, please contact me at 202-208-3801, or your staff may contact Patrick Wilkinson, Chief of BLM's Legislative Affairs Division, at 202-912-7421. A similar reply has been sent to Representative Holt.

Sincerely,

Robert V. Abbey  
Director

Enclosure

Bureau of Land Management Response to Questions 2d and 4

**Question (2d):** Please provide documentation that indicates the location of deposits on federal lands, the type of gas or oil formation, the quantity of estimated oil or gas, and whether the deposit is located in, near or below an underground source of drinking water (as defined in the Safe Drinking Water Act).

**Answer (2d):** Section 3 of the Energy Policy and Conservation Act (EPCA) Phase III Report provides maps of Federal oil and gas for all sedimentary rock basins in the United States. Oil and gas have been found in all of the basins listed in the report and occur in sedimentary rocks of various types (shale, sandstone, and limestone in most cases). The BLM and the EPCA Report do not track the types of formations in which particular deposits of oil and gas occur. The table below provides estimates of undiscovered, technically recoverable resources and reserve growth in each sedimentary basin, and references the associated EPCA Phase III table published in 2008.

<b>Federal Oil &amp; Gas Resources by Study Area</b>			
	Oil (MMbbl)	Gas (BCF)	EPCA Phase III Tables
Total <sup>1</sup>	30,503	230,975	3-1
Northern Alaska <sup>2</sup>	17,758	79,635	3-2
Central Alaska	149	2,721	3-3
Southern Alaska	270	394	3-4
Eastern Oregon/Washington	3	856	3-5
Ventura Basin	281	453	3-6
Eastern Great Basin	1,356	204	3-7
Uinta-Piceance Basin	367	14,111	3-8
Paradox Basin	312	1,048	3-9
San Juan Basin	151	25,100	3-10
Montana Thrust Belt	171	6,308	3-11
Williston Basin	367	618	3-12
Powder River Basin	1,290	9,137	3-13
Wyoming Thrust Belt	44	633	3-14
Southwestern Wyoming	2,082	68,033	3-15
Denver Basin	17	88	3-16
Florida Peninsula	74	323	3-17
Black Warrior Basin	1	391	3-18
Appalachian Basin	33	2,423	3-19
Extrapolated Results for Alaska	623	2,335	3-20
Extrapolated Results - Western Region	5,064	14,731	3-21
Extrapolated Results - Eastern Region	93	1,435	3-22

1 – The updated estimate of total undiscovered, technically recoverable oil reported above would be reduced to 20,839 MMbbl based on updated assessments for the National Petroleum Reserve-Alaska (NPR-A). The updated estimate of total undiscovered, technically recoverable gas reported above would be reduced to 222,462 BCF based on updated assessments for the NPR-A.

2 – In October 2010, the USGS updated their assessment of undiscovered, technically recoverable resources in the (NPR-A) which is in the Northern Alaska Region. The estimate of undiscovered, technically recoverable oil reported above would be reduced by 9,664 MMbbl. The estimate of undiscovered, technically recoverable gas reported above would be reduced by 8,513 BCF.

## Bureau of Land Management Response to Questions 2d and 4

Neither the EPCA Phase III Report nor any other congressionally funded project has looked at the co-occurrence of oil and gas with underground sources of drinking water. The USGS has published a Ground Water Atlas of the United States showing an inventory of principal aquifers that are in six types of rocks and deposits (please see [http://pubs.usgs.gov/ha/ha730/ch\\_a/gif/A004\\_us.gif](http://pubs.usgs.gov/ha/ha730/ch_a/gif/A004_us.gif)).

Generally, underground sources of drinking water occur in most sedimentary basins. Drinking water is typically much shallower than oil and gas deposits and is separated from the oil and gas deposits by layers of impermeable rock. The BLM evaluates the potential for groundwater occurrences for each proposed oil and gas well during the Application for Permit to Drill process. The operator is required to identify and isolate all non-hydrocarbon bearing usable water zones with casing and cement. The BLM reviews the drilling plan to ensure that the casing design is capable of successfully isolating and protecting usable water. The information submitted by the operator is confirmed against the best available data for groundwater resources in the area. This data source is typically the state agency charged with water quality or water rights, but it can be the EPA if a state agency does not have primacy. The BLM also makes it a priority to witness casing jobs to verify adherence to the approved drilling permit.

Coal seams represent a special management situation for the BLM. Several coal fields have been developed for coal bed natural gas. Most of these coal seams are also aquifers. In order for the coal bed natural gas to be produced, the water in the coal needs to be removed. After the initial gas is produced, water is reinjected at high pressure to break up the coal and the seam is dewatered a second time. This allows additional gas to be produced. Coal aquifers can supply drinking water, but it is generally of low quality and rarely used without treatment.

Bureau of Land Management Response to Questions 2d and 4

**Question (4):** *Of the wells located on public lands that are currently used for natural gas development, how many have been hydraulically fractured? Of the wells located on public lands currently used for oil development, how many have been hydraulically fractured? Please provide data indicating for each leased area in which hydraulic fracturing occurred whether fracturing occurred in, near or below an underground source of drinking water (as defined in the Safe Drinking Water Act).*

**Answer (4):** Professional estimates solicited from BLM field offices projected 90 to 95 percent of wells drilled for natural gas production over the last 5 years were hydraulically fractured. Because it was not feasible to review records for more than 86,000 wells, the BLM agreed to undertake a review of 706 randomly-selected wells. This sample size represents a confidence rate of 95 percent, and was reached in agreement with your staff. The table below summarizes the results of that review. Attachment 1 provides a more detailed listing for each of the 706 wells sampled.

<b>Summary of Wells Fractured In, Near, or Below Underground Sources of Drinking Water (USDW)</b>							
Type	*In USDW	**Near USDW	Below USDW	***Fractured, but not in, near or below USDW	Total Fractured	Not Fractured	****Unknown
Oil	0	0	43	115	158(59%)	107	1
Gas	49	5	113	222	389 (88%)	51	0
Combined	49	5	156	337	547 (78%)	158 (22%)	1 (<1%)

\*Coal Bed Natural Gas is produced from coal seams containing Underground Sources for Drinking Water. The seam is dewatered to reduce pressure and release the gas, then water is reinjected to fracture the coal and produce gas.

\*\* "Near an Underground Source of Drinking Water" is defined as within the zone of endangering influence which is a fixed radius around the well of not less than ¼ mile.

\*\*\*Fractured, but not in, below or near an USDW – Means fractured in an area that does not supply a public water system or; in an area that may have sufficient water to supply a public water system but does not currently supply water for human consumption or; does not supply water that is less than 10,000 mg/l total dissolved solids.

\*\*\*\*Drilled under private lease that government subsequently acquired.

Number of Wells Hydraulically Fractured and Relationship to Underground Sources of Drinking Water  
(706 well sample)

Field Office	Operator	Case Number	Lease Number	American Petroleum Institute Number	County	Surface Management Entity	Oil or Gas Well	Hydraulically Fractured?	Relationship to an Underground Source of Drinking Water (USDW)
Buffalo	ANADARKO PETROLEUM CORP	WYW149537A	WYW130637	490192309200S1	JOHNSON	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	ANADARKO PETROLEUM CORP	WYW157751A	WYW131747	490192692500S1	JOHNSON	BLM	*Gas	Yes	*Fractured in an USDW
Buffalo	ANADARKO PETROLEUM CORP	WYW163057X	WYW153069	490056035600S1	CAMPBELL	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	BILL BARRETT CORPORATION	WYW0271124	WYW0271124	490055622900S1	CAMPBELL	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	BILL BARRETT CORPORATION	WYW041522	WYW041522	490055948700S1	CAMPBELL	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	BILL BARRETT CORPORATION	WYW145183	WYW145183	490055573900S1	CAMPBELL	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	E&B NATURAL RESOURCES MGMT	WYW140779	WYW140779	490056037300S1	CAMPBELL	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	JM HUBER CORP	WYW0323689A	WYW0323689A	490056018800S1	CAMPBELL	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	JM HUBER CORP	WYW134568	WYW134568	490055716700S1	CAMPBELL	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	JM HUBER CORP	WYW135613	WYW135613	490054589600S1	CAMPBELL	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	LANCE OIL + GAS CO INC	WYW104539	WYW104539	490054945600S1	CAMPBELL	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	LANCE OIL + GAS CO INC	WYW129532	WYW129532	490055519400S1	CAMPBELL	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	LANCE OIL + GAS CO INC	WYW143958	WYW143958	490055872400S1	CAMPBELL	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	LANCE OIL + GAS CO INC	WYW148368A	WYW135630	490192525500S1	JOHNSON	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	LANCE OIL + GAS CO INC	WYW149556A	WYW149151	490192301300S1	JOHNSON	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	LANCE OIL + GAS CO INC	WYW151581X	WYW149364	490192846300S1	JOHNSON	BLM	*Gas	Yes	*Fractured in an USDW
Buffalo	LANCE OIL + GAS CO INC	WYW159215	WYW159215	490055911600S1	CAMPBELL	BLM	*Gas	Yes	*Fractured in an USDW
Buffalo	LANCE OIL + GAS CO INC	WYW95702	WYW95702	490054472500S1	CAMPBELL	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	NOBLE ENERGY, INC	WYW129512	WYW129512	490055677400S1	CAMPBELL	BLM	*Gas	Yes	*Fractured in an USDW
Buffalo	NOBLE ENERGY, INC	WYW139678	WYW139678	490055160500S1	CAMPBELL	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	NOBLE ENERGY, INC	WYW140770	WYW140770	490053851200S1	CAMPBELL	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	NOBLE ENERGY, INC	WYW151534A	WYW128619	490192304200S1	JOHNSON	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	PEABODY NATURAL GAS, LLC	WYW64254	WYW64254	490055201200S1	CAMPBELL	USFS	*Gas	Yes	*Fractured in an USDW
Buffalo	PENNACO ENERGY, INC.	WYW156256	WYW146297	490054502200S1	CAMPBELL	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	PINNACLE GAS RESOURCES, INC	WYW172627	WYW172627	490332693300S1	SHERIDAN	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	SAGA PETROLEUM, LLC OF CO	WYW164124	WYW7527	490054937100S1	CAMPBELL	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	STORM CAT ENERGY (USA) OP CORP	WYW151715	WYW151715	490055337000S1	CAMPBELL	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	STORM CAT ENERGY (USA) OP CORP	WYW164614	WYW164614	490055633600S1	CAMPBELL	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	WILLIAMS PRODUCTION RMT CO LLC	WYW126945	WYW126945	490053541100S1	CAMPBELL	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	WILLIAMS PRODUCTION RMT CO LLC	WYW127804	WYW127804	490192406900S1	JOHNSON	BLM	*Gas	Yes	*Fractured in an USDW
Buffalo	WILLIAMS PRODUCTION RMT CO LLC	WYW145616	WYW145616	490192409400S1	JOHNSON	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	WILLIAMS PRODUCTION RMT CO LLC	WYW146823	WYW146823	490192655500S1	JOHNSON	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	WILLIAMS PRODUCTION RMT CO LLC	WYW148333A	WYW144538	490055822800S1	CAMPBELL	BLM	*Gas	Yes	*Fractured in an USDW
Buffalo	WILLIAMS PRODUCTION RMT CO LLC	WYW148333A	WYW126405	490055005000S1	CAMPBELL	BLM	*Gas	Yes	*Fractured in an USDW
Buffalo	WILLIAMS PRODUCTION RMT CO LLC	WYW148817A	WYW130075	490054897200S1	CAMPBELL	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	WILLIAMS PRODUCTION RMT CO LLC	WYW149561A	WYW146834	490192622800S1	JOHNSON	BLM	*Gas	Yes	*Fractured in an USDW
Buffalo	WILLIAMS PRODUCTION RMT CO LLC	WYW150201	WYW143541	490053540700S1	CAMPBELL	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	WILLIAMS PRODUCTION RMT CO LLC	WYW150648A	WYW140809	490192431200S1	JOHNSON	BLM	*Gas	Yes	*Fractured in an USDW
Buffalo	WILLIAMS PRODUCTION RMT CO LLC	WYW153772X	WYW153071	490055996500S1	CAMPBELL	Non-Federal	*Gas	Yes	*Fractured in an USDW

Number of Wells Hydraulically Fractured and Relationship to Underground Sources of Drinking Water  
(706 well sample)

Field Office	Operator	Case Number	Lease Number	American Petroleum Institute Number	County	Surface Management Entity	Oil or Gas Well	Hydraulically Fractured?	Relationship to an Underground Source of Drinking Water (USDW)
Buffalo	WILLIAMS PRODUCTION RMT CO LLC	WYW153772X	WYW0161144	490056002300S1	CAMPBELL	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	WILLIAMS PRODUCTION RMT CO LLC	WYW153772X	WYW127800	490055846200S1	CAMPBELL	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	WILLIAMS PRODUCTION RMT CO LLC	WYW175844	WYW146824	490192528200S1	JOHNSON	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	WILLIAMS PRODUCTION RMT CO LLC	WYW85360	WYW85360	490192398300S1	JOHNSON	BLM	*Gas	Yes	*Fractured in an USDW
Buffalo	WINDSOR ENERGY GROUP LLC	WYW37098	WYW37098	490192793000S1	JOHNSON	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	YATES PETROLEUM CORPORATION	WYW128607	WYW128607	490055901700S1	CAMPBELL	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	YATES PETROLEUM CORPORATION	WYW133620	WYW133620	490192571100S1	JOHNSON	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	YATES PETROLEUM CORPORATION	WYW146910	WYW146910	490192822200S1	JOHNSON	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	YATES PETROLEUM CORPORATION	WYW153681	WYW153681	490192573800S1	JOHNSON	Non-Federal	*Gas	Yes	*Fractured in an USDW
Buffalo	PATRIOT ENERGY RESOURCES LLC	WYW130063	WYW130063	490053614200S1	CAMPBELL	Non-Federal	*Gas	Yes	*Fractured in an USDW
Canon City	AUGUSTUS ENERGY PARTNERS LLC	COC13290	COC13290	051250720000S1	YUMA	Non-Federal	Gas	Yes	Fractured below an USDW
Canon City	AUGUSTUS ENERGY PARTNERS LLC	COC13292	COC13292	051251100100S1	YUMA	Non-Federal	Gas	Yes	Fractured below an USDW
Canon City	EARTHSTONE ENERGY INC	COC49184	COC37842	051231443200A2	WELD	Non-Federal	Gas	Yes	Fractured below an USDW
Canon City	NOBLE ENERGY INC	COC56184	COC52545	051231682000S1	WELD	Non-Federal	Gas	Yes	Fractured below an USDW
Canon City	OMIMEX PETROLEUM INC	COC67167	COC67167	051250948900S1	YUMA	Non-Federal	Gas	Yes	Fractured below an USDW
Durango	BP AMERICA PRODUCTION COMPANY	COC47114	COC47114	050670671500S1	LA PLATA	USFS	Gas	Yes	Fractured below an USDW
Durango	BP AMERICA PRODUCTION COMPANY	COC51868	COC17215	050670898400S1	LA PLATA	BLM	Gas	Yes	Fractured below an USDW
Glenwood Spgs	ENCANA OIL & GAS (USA) INC	COC0128381	COC010075A	050451088300S1	GARFIELD	BLM	Gas	Yes	Fractured below an USDW
Glenwood Spgs	ENCANA OIL & GAS (USA) INC	COC33152	COC27826	050451453700S1	GARFIELD	BLM	Gas	Yes	Fractured below an USDW
Glenwood Spgs	ENCANA OIL & GAS (USA) INC	COC55972E	COC56258	050450747200S1	GARFIELD	Non-Federal	Gas	Yes	Fractured below an USDW
Glenwood Spgs	ENCANA OIL & GAS (USA) INC	COC55972E	COC50128	050451867700S1	GARFIELD	BLM	Gas	Yes	Fractured below an USDW
Glenwood Spgs	ENCANA OIL & GAS (USA) INC	COC55972E	COC55603	050450924700S1	GARFIELD	Non-Federal	Gas	Yes	Fractured below an USDW
Glenwood Spgs	ENCANA OIL & GAS (USA) INC	COC55972E	COC55604	050451050100S1	GARFIELD	Non-Federal	Gas	Yes	Fractured below an USDW
Glenwood Spgs	WILLIAMS PRODUCTION RMT CO	COC073359	COC59137	050451192200S1	GARFIELD	BLM	Gas	Yes	Fractured below an USDW
Glenwood Spgs	WILLIAMS PRODUCTION RMT CO	COC55363	COC62163	050451305200S1	GARFIELD	BLM	Gas	Yes	Fractured below an USDW
Glenwood Spgs	WILLIAMS PRODUCTION RMT CO	COC62740	COC62162	050451016300S1	GARFIELD	BLM	Gas	Yes	Fractured below an USDW
Glenwood Spgs	WILLIAMS PRODUCTION RMT CO	COC67447	COC62161	050451014400S1	GARFIELD	BLM	Gas	Yes	Fractured below an USDW
Grand Junction	OXY USA INC	COC72362	COC50131	050770956000S1	MESA	Non-Federal	Gas	yes	Fractured below an USDW
Meeker	ENCANA OIL & GAS (USA) INC	COC047615A	COC015039	051030941500S1	RIO BLANCO	BLM	Gas	Yes	Fractured below an USDW
Meeker	ENCANA OIL & GAS (USA) INC	COC47647A	COC0111235	051030993300S1	RIO BLANCO	BLM	Gas	Yes	Fractured below an USDW
Meeker	EXXON MOBIL CORP	COC69547A	COC62806	051031051300S1	RIO BLANCO	Non-Federal	Gas	Yes	Fractured below an USDW
Meeker	EXXON MOBIL CORP	COC69547A	COC60723	051031100900S1	RIO BLANCO	BLM	Gas	Yes	Fractured below an USDW
Meeker	EXXONMOBIL OIL CORPORATION	COC47666A	COD035679	051031052400S1	RIO BLANCO	BLM	Gas	Yes	Fractured below an USDW
Meeker	EXXONMOBIL OIL CORPORATION	COC47666A	COD052141	051031137300S1	RIO BLANCO	BLM	Gas	Yes	Fractured below an USDW
Meeker	FOUNDATION ENERGY MGMT LLC	COC10179	COC10179	051031015900S1	RIO BLANCO	BLM	Gas	Yes	Fractured below an USDW
Meeker	KOCH EXPLORATION COMPANY LLC	COC0127529	COC0127529	051031023500S1	RIO BLANCO	BLM	Gas	Yes	Fractured below an USDW
Meeker	LOCIN OIL CORPORATION	COC47627D	COC02741	051030892400S1	RIO BLANCO	BLM	Gas	Yes	Fractured below an USDW
Meeker	ROBERT L BAYLESS PRODUCER LLC	COC13202	COC13202	051030783000S1	RIO BLANCO	BLM	Gas	Yes	Fractured below an USDW
Meeker	WEXPRO COMPANY	COC03925A	COC03925A	051030973500S1	RIO BLANCO	BLM	Gas	Yes	Fractured below an USDW



Number of Wells Hydraulically Fractured and Relationship to Underground Sources of Drinking Water  
(706 well sample)

Field Office	Operator	Case Number	Lease Number	American Petroleum Institute Number	County	Surface Management Entity	Oil or Gas Well	Hydraulically Fractured?	Relationship to an Underground Source of Drinking Water (USDW)
Meeker	WILLIAMS PRODUCTION RMT CO.	COC68239X	COC60733	051031108000S1	RIO BLANCO	BLM	Gas	Yes	Fractured below an USDW
Jackson	SEECO INCORPORATED	ARES39821	ARES39821	031311083500D2	SEBASTIAN	MILITARY	Gas	Yes	Fractured below an USDW
Jackson	XTO ENERGY INCORPORATED	ARES11120	ARES11120	031311007800C1	SEBASTIAN	MILITARY	Gas	Yes	Fractured below an USDW
Jackson	XTO ENERGY INCORPORATED	ARES15188	ARES15188	031311010100D1	SEBASTIAN	MILITARY	Gas	Yes	Fractured below an USDW
Milwaukee	EQT CORPORATION	PAES36997	PAES36997	370632797600S1	INDIANA	Non-Federal	Gas	Yes	Fractured below an USDW
Milwaukee	GREENBRIER ENERGY INC	OHES49564	OHES49564	341112175000S1	MONROE	USFS	Gas	Yes	Fractured below an USDW
Milwaukee	MIKE ROSS INC	WVES36898	WVES36898	470070217500S1	BRAXTON	Non-Federal	Gas	Yes	Fractured below an USDW
Milwaukee	PETROX INC	OHES47144	OHES47144	340092305900S1	ATHENS	USFS	Gas	Yes	Fractured below an USDW
Buffalo	DEVON ENERGY PRODUCTION CO, LP	WYW110656	WYW34720	490052389800S1	CAMPBELL	Non-Federal	Gas	Yes	Fractured below an USDW
Casper	BILL BARRETT CORPORATION	WYW109467A	WYW036778	490252291000S1	NATRONA	BLM	Gas	Yes	Fractured below an USDW
Green River	CABOT OIL & GAS CORPORATION	WYW090897D	WYW20158	490372705200S1	SWEETWATER	BLM	Gas	Yes	Fractured below an USDW
Green River	CABOT OIL & GAS CORPORATION	WYW129627D	WYW126575	490372675900S1	SWEETWATER	BLM	Gas	Yes	Fractured below an USDW
Green River	CABOT OIL & GAS CORPORATION	WYW146604	WYW5581	490372400100S1	SWEETWATER	BLM	Gas	Yes	Fractured below an USDW
Green River	CHEVRON USA INCORPORATED	WYW090895A	WYW42788	490232127600S1	LINCOLN	BLM	Gas	Yes	Fractured below an USDW
Green River	CREDO PETROLEUM CORPORATION	WYW24135	WYW24135	490372152000S1	SWEETWATER	BLM	Gas	Yes	Fractured below an USDW
Green River	CROWN ENERGY PARTNERS	WYW110546	WYW72845	490232055400S1	LINCOLN	BLM	Gas	Yes	Fractured below an USDW
Green River	CROWN ENERGY PARTNERS	WYW69480	WYW69480	490372414200S1	SWEETWATER	BOR	Gas	Yes	Fractured below an USDW
Green River	ENCANA OIL & GAS INCORPORATED	WYW164184E	WYW150873	490352297700S1	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW
Green River	EOG RESOURCES INCORPORATED	WYW094519B	WYE022931	490232070900S1	LINCOLN	BLM	Gas	Yes	Fractured below an USDW
Green River	MAK-J ENERGY WYOMING LLC	WYW88489	WYW88489	490372632400S2	SWEETWATER	BLM	Gas	Yes	Fractured below an USDW
Green River	TRUE OIL COMPANY	WYW3299	WYW3299	490372071900S1	SWEETWATER	BLM	Gas	Yes	Fractured below an USDW
Green River	WHITING OIL AND GAS CORPORATIO	WYW62117	WYW62117	490352290500S1	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW
Green River	XTO ENERGY INCORPORATED	WYW055275	WYW055275	490232092300S2	LINCOLN	BLM	Gas	Yes	Fractured below an USDW
Green River	XTO ENERGY INCORPORATED	WYW090896B	WYW31973	490232195300S1	LINCOLN	BLM	Gas	Yes	Fractured below an USDW
Green River	XTO ENERGY INCORPORATED	WYW090896B	WYW0314961	490232195500S1	LINCOLN	BOR	Gas	Yes	Fractured below an USDW
Kemmerer	BP AMERICA PRODUCTION CO	WYW0310649	WYW0310649	490232137100S1	LINCOLN	BLM	Gas	Yes	Fractured below an USDW
Kemmerer	BP AMERICA PRODUCTION CO	WYW109754A	WYW0311096	490232117000S1	LINCOLN	BLM	Gas	Yes	Fractured below an USDW
Kemmerer	BP AMERICA PRODUCTION CO	WYW168703	WYW0311095	490232220300S1	LINCOLN	BLM	Gas	Yes	Fractured below an USDW
Kemmerer	KERR-MCGEE OIL & GAS ONSHORE L	WYW109472E	WYW0320185	490232139700S1	LINCOLN	BLM	Gas	Yes	Fractured below an USDW
Kemmerer	KERR-MCGEE OIL & GAS ONSHORE L	WYW109472E	WYW0320185	490232083100S2	LINCOLN	BLM	Gas	Yes	Fractured below an USDW
Kemmerer	KERR-MCGEE OIL & GAS ONSHORE L	WYW109472K	WYW0318354	490232143200S1	LINCOLN	BLM	Gas	Yes	Fractured below an USDW
Lander	BURLINGTON RESOURCES O&G CO	WYW3180	WYW3180	490132068300S1	FREMONT	BLM	Gas	Yes	Fractured below an USDW
Lander	ENCANA OIL AND GAS (USA) INC	WYW147739AA	WYW054756	490132284400S1	FREMONT	BLM	Gas	Yes	Fractured below an USDW
Lander	ENCANA OIL AND GAS (USA) INC	WYW147739AA	WYW054759	490132315100S1	FREMONT	BLM	Gas	Yes	Fractured below an USDW
Pinedale	BP AMERICA PRODUCTION COMPANY	WYW128703	WYW128703	490352470600S1	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW
Pinedale	DEVON ENERGY PRODUCTION CO LP	WYW148569	WYW148569	490352226800S1	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW
Pinedale	ENCANA OIL & GAS USA INC	WYW125943	WYW125943	490352508800S1	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW
Pinedale	ENCANA OIL & GAS USA INC	WYW125944	WYW125944	490352354100S1	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW
Pinedale	ENCANA OIL & GAS USA INC	WYW125950	WYW125950	490352171600S1	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW

Number of Wells Hydraulically Fractured and Relationship to Underground Sources of Drinking Water  
(706 well sample)

Field Office	Operator	Case Number	Lease Number	American Petroleum Institute Number	County	Surface Management Entity	Oil or Gas Well	Hydraulically Fractured?	Relationship to an Underground Source of Drinking Water (USDW)
Pinedale	ENCANA OIL & GAS USA INC	WYW127749	WYW127749	490352668800S1	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW
Pinedale	ENCANA OIL & GAS USA INC	WYW128703	WYW128703	490352514300S1	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW
Pinedale	ENCANA OIL & GAS USA INC	WYW141883	WYW141883	490352315300S1	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW
Pinedale	EOG RESOURCES INCORPORATED	WYW109621A	WYW0256493	490352096500S2	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW
Pinedale	EOG RESOURCES INCORPORATED	WYW109828	WYE09156B	490232199900S1	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW
Pinedale	EOG RESOURCES INCORPORATED	WYW21127	WYW21127	490352319800S1	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW
Pinedale	EXXONMOBIL OIL CORPORATION	WYW109548B	WYW01425	490352200600D1	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW
Pinedale	EXXONMOBIL OIL CORPORATION	WYW109548C	WYE022972	490352350500S1	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW
Pinedale	EXXONMOBIL OIL CORPORATION	WYW109728B	WYE018722A	490352215600S2	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW
Pinedale	EXXONMOBIL OIL CORPORATION	WYW109728B	WYE024799	490352280500A2	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW
Pinedale	EXXONMOBIL OIL CORPORATION	WYW109728C	WYW148411	490352288100S1	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW
Pinedale	NEWFIELD PRODUCTION COMPANY	WYW118148	WYW118148	490352330700S1	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW
Pinedale	OMIMEX PETROLEUM INC	WYW136819	WYW136819	490352219000S1	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW
Pinedale	QEP ENERGY COMPANY	WYW08589	WYW08589	490352394200S1	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW
Pinedale	SWEPI LP	WYW06270	WYW06270	490352247300S1	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW
Pinedale	SWEPI LP	WYW130234	WYW130234	490352323100S1	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW
Pinedale	SWEPI LP	WYW130234	WYW130234	490352323000S1	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW
Pinedale	SWEPI LP	WYW144994	WYW144994	490352581200S1	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW
Pinedale	ULTRA RESOURCES INC	WYW015316	WYW015316	490352432800S1	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW
Pinedale	ULTRA RESOURCES INC	WYW015316	WYW015316	490352505400S1	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW
Pinedale	ULTRA RESOURCES INC	WYW015316	WYW015316	490352370900S1	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW
Pinedale	ULTRA RESOURCES INC	WYW06270	WYW06270	490352779000S1	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW
Pinedale	ULTRA RESOURCES INC	WYW06270	WYW06270	490352586400S1	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW
Pinedale	ULTRA RESOURCES INC	WYW06286	WYW06286	490352454800S1	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW
Pinedale	ULTRA RESOURCES INC	WYW06286	WYW06286	490352346900S1	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW
Pinedale	ULTRA RESOURCES INC	WYW118155	WYW118155	490352226700S1	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW
Pinedale	ULTRA RESOURCES INC	WYW135124	WYW135124	490352314300S1	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW
Pinedale	ULTRA RESOURCES INC	WYW143046	WYW143046	490352708900S1	SUBLETTE	BLM	Gas	Yes	Fractured below an USDW
Rawlins	ANADARKO E & P COMPANY LP	WYW109475X	WYW4865	490072383200X1	CARBON	BLM	Gas	Yes	Fractured below an USDW
Rawlins	BP AMERICA PRODUCTION COMPANY	WYW110373	WYW35311	490072341700S1	CARBON	BLM	Gas	Yes	Fractured below an USDW
Rawlins	BP AMERICA PRODUCTION COMPANY	WYW110373	WYW35311	490072341800S1	CARBON	BLM	Gas	Yes	Fractured below an USDW
Rawlins	DEVON ENERGY PRODUCTION CO LP	WYW109413E	WYW026759	490072059400S1	CARBON	BLM	Gas	Yes	Fractured below an USDW
Rawlins	DEVON ENERGY PRODUCTION CO LP	WYW145714	WYW145714	490072216300S1	CARBON	BLM	Gas	Yes	Fractured below an USDW
Rawlins	DEVON ENERGY PRODUCTION CO LP	WYW154359F	WYW144312	490072376300S1	CARBON	BLM	Gas	Yes	Fractured below an USDW
Rawlins	DOUBLE EAGLE PETROLEUM	WYW163121A	WYW163520	490072361000S1	CARBON	BLM	Gas	Yes	Fractured below an USDW
Rawlins	MARATHON OIL CO	WYW109743B	WYW34651	490370581600A1	SWEETWATER	BLM	Gas	Yes	Fractured below an USDW
Rawlins	MARATHON OIL CO	WYW158198	WYW021571	490372525500S1	SWEETWATER	BLM	Gas	Yes	Fractured below an USDW
Rawlins	SAMSON RESOURCES COMPANY	WYW16350	WYW16350	490372648700S1	SWEETWATER	BLM	Gas	Yes	Fractured below an USDW
Worland	BOWER PROPERTIES II LLC	WYW132356	WYW132356	490432084000D2	WASHAKIE	BLM	Gas	Yes	Fractured below an USDW



Number of Wells Hydraulically Fractured and Relationship to Underground Sources of Drinking Water  
(706 well sample)

Field Office	Operator	Case Number	Lease Number	American Petroleum Institute Number	County	Surface Management Entity	Oil or Gas Well	Hydraulically Fractured?	Relationship to an Underground Source of Drinking Water (USDW)
Worland	CONTINENTAL RESOURCES INC	WYW109468D	WYW020999	490432076300S1	WASHAKIE	BLM	Gas	Yes	Fractured below an USDW
Worland	ENCORE ENERGY PARTNERS OPERATI	WYC073727	WYC073727	490290605600S1	PARK	BLM	Gas	Yes	Fractured below an USDW
Worland	FIDELITY EXPL & PROD CO	WYW109689A	WYC067672	490290635300S2	PARK	BLM	Gas	Yes	Fractured below an USDW
Tulsa	BP AMERICA PRODUCTION COMPANY	OKNM74312	OKBLM037514	351212190500D1	PITTSBURG	Non-Federal	Gas	Yes	Fractured below an USDW
Tulsa	BURLINGTON RES OIL + GAS CO LP	OKNM74649	OKNM15715	351292261600S1	ROGER MILLS	USFS	Gas	Yes	Fractured below an USDW
Tulsa	UNION PACIFIC RESOURCES CO	TXNM27328	TXNM27328	424033039700S1	SABINE	USFS	Gas	Yes	Fractured below an USDW
Glenwood Spgs	ENCANA OIL & GAS (USA) INC	COC55972E	COC55604	050451844400S1	GARFIELD	Non-Federal	Gas	Yes	**Fractured near an USDW
Glenwood Spgs	WILLIAMS PRODUCTION RMT CO	COC58078	COC46030	050451632500S1	GARFIELD	BLM	Gas	Yes	**Fractured near an USDW
Glenwood Spgs	WILLIAMS PRODUCTION RMT CO	COC62160	COC62160	050451069200S1	GARFIELD	BLM	Gas	Yes	**Fractured near an USDW
Price	MARION ENERGY INCORPORATED	UTU63018A	UTU01740	430153068500S1	EMERY	USFS	Gas	Yes	**Fractured near an USDW
Price	MERIT ENERGY COMPANY	UTU63089O	UTU15203	430153011700S1	EMERY	USFS	Gas	Yes	**Fractured near an USDW
Craig	CHEVRON USA INCORPORATED	COC0128360	COD033571B	050810713700S1	MOFFAT	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Glenwood Spgs	ENCANA OIL & GAS (USA) INC	COC01523	COC01523	050451116000S1	GARFIELD	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Glenwood Spgs	NOBLE ENERGY INC	COC23443	COC23443	050451430500S1	GARFIELD	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Glenwood Spgs	OXY USA WTP LP	COC66724	COC66724	050770887800S1	MESA	USFS	Gas	Yes	***Fractured, but not in, below or near an USDW
Glenwood Spgs	OXY USA WTP LP	COC66918	COC66918	050770939300S1	MESA	USFS	Gas	Yes	***Fractured, but not in, below or near an USDW
Glenwood Spgs	WILLIAMS PRODUCTION RMT CO	COC24603	COC24603	050450719200S1	GARFIELD	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Glenwood Spgs	WILLIAMS PRODUCTION RMT CO	COC24603	COC24603	050450741100S1	GARFIELD	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Glenwood Spgs	WILLIAMS PRODUCTION RMT CO	COC45093	COC24603	050451022600S1	GARFIELD	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Glenwood Spgs	WILLIAMS PRODUCTION RMT CO	COC62160	COC62160	050451280600S1	GARFIELD	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Glenwood Spgs	WILLIAMS PRODUCTION RMT CO	COC62160	COC62160	050450648600S1	GARFIELD	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Glenwood Spgs	WILLIAMS PRODUCTION RMT CO	COC62737	COC62162	050451585100S1	GARFIELD	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Glenwood Spgs	WILLIAMS PRODUCTION RMT CO	COC62737	COC62162	050451485200S1	GARFIELD	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Glenwood Spgs	WILLIAMS PRODUCTION RMT CO	COC62739	COC62162	050450992200S1	GARFIELD	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Grand Junction	ENCANA OIL & GAS (USA) INC	COC47614A	COC16982	050450611900S1	GARFIELD	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Grand Junction	HRM RESOURCES LLC	COC17469	COC17469	050450614700S1	GARFIELD	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Dickinson	BTA OIL PRODUCERS	NDM91721X	NDM32156	330110026800S1	BOWMAN	Non-Federal	Gas	Yes	***Fractured, but not in, below or near an USDW
Dickinson	BTA OIL PRODUCERS	NDM91721X	NDM92283	330110113500S1	BOWMAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Great Falls	FIDELITY EXPLORATION & PROD CO	MTM68650D	MTGF084397	250712256400S1	PHILLIPS	Non-Federal	Gas	Yes	***Fractured, but not in, below or near an USDW
Great Falls	NOBLE ENERGY INC	MTM68678B	MTM15623	250712196400S1	PHILLIPS	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Great Falls	OMIMEX CANADA LTD	MTM84071	MTM84071	250052317900S1	BLAINE	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Miles City	FIDELITY EXPL & PROD CO	8910086000	MTBIL021068A	250252218100S1	FALLON	Non-Federal	Gas	Yes	***Fractured, but not in, below or near an USDW
Miles City	FIDELITY EXPL & PROD CO	8910086000	MTBIL032090	250252235600S1	FALLON	Non-Federal	Gas	Yes	***Fractured, but not in, below or near an USDW
Miles City	FIDELITY EXPL & PROD CO	892000374A	NDBIS024640	330110116700S1	BOWMAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Miles City	FIDELITY EXPL & PROD CO	MTM89396	MTBIL024347B	250252178900S1	FALLON	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	BOPCO LP	NMNM111784	NMLC059365	300153295500S1	EDDY	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	C & D MANAGEMENT COMPANY	NMLC045818A	NMLC045818A	300152284800S1	EDDY	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	C & D MANAGEMENT COMPANY	NMLC045818A	NMLC045818A	300152284800S1	EDDY	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	CHEVRON USA INCORPORATED	NMLC065457	NMLC065457	300153338700S1	EDDY	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW

Number of Wells Hydraulically Fractured and Relationship to Underground Sources of Drinking Water  
(706 well sample)

Field Office	Operator	Case Number	Lease Number	American Petroleum Institute Number	County	Surface Management Entity	Oil or Gas Well	Hydraulically Fractured?	Relationship to an Underground Source of Drinking Water (USDW)
Carlsbad	DEVON ENERGY PRODUCTION CO L P	NMNM114018	NMNM112253	300153396600S1	EDDY	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	DEVON ENERGY PRODUCTION CO L P	NMNM72419	NMNM0514349A	300152141700S1	EDDY	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	DEVON ENERGY PRODUCTION CO L P	NMNM88104	NMNM88104	300153114200S1	EDDY	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	FASKEN OIL & RANCH LTD	NMNM72290	NMNM17097	300152403500S1	EDDY	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	MEWBOURNE OIL COMPANY	NMLC066087A	NMLC066087A	300153592800S1	EDDY	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	MEWBOURNE OIL COMPANY	NMNM112736	NMNM111955	300153365800S1	EDDY	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	MEWBOURNE OIL COMPANY	NMNM83583	NMNM83583	300152934300S1	EDDY	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	RKI EXPLORTION AND PRODUCTION	NMNM87881	NMNM34247	300152684700C1	EDDY	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	YATES PETROLEUM CORPORATION	NMNM120829	NMNM1372	300152671100S2	EDDY	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	YATES PETROLEUM CORPORATION	NMNM85354	NMNM0251099A	300153068700S1	EDDY	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	YATES PETROLEUM CORPORATION	NMNM92742	NMNM92742	300153234600S1	EDDY	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BP AMERICA PRODUCTION CO.	NMNM013688	NMNM013688	300451034800C1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BP AMERICA PRODUCTION CO.	NMNM09717	NMNM09717	300453193900C2	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BP AMERICA PRODUCTION CO.	NMNM73215	NMSF078051	300453189000C2	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BP AMERICA PRODUCTION CO.	NMNM73345	NMNM010989	300453189500C2	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BP AMERICA PRODUCTION CO.	NMNM73991	NMNM03566	300452491700C1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BP AMERICA PRODUCTION CO.	NMSF078049	NMSF078049	300452272100C2	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BP AMERICA PRODUCTION CO.	NMSF078499	NMSF078499	300452396700C1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BP AMERICA PRODUCTION CO.	NMSF078596A	NMSF078596A	300452556400C1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM01594	NMNM01594	300452257900S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM01772A	NMNM01772A	300452529100D2	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM02861	NMNM02861	300453444900S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM04375	NMNM04375	300453424600C1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM09840	NMNM09840	300452076900S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM104884	NMNM03195	300453072800C1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM121407	NMSF078097	300453433600S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM73184	NMSF079962	300452991200S1	SAN JUAN	Non-Federal	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM73452	NMSF076958	300450827700S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM73897	NMSF077865	300450799300C1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM74040	NMSF078134	300452054800S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM76432	NMSF079962	300452664300S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM78372B	NMSF081155	300453040200C1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM78394B	NMNM03491	300453441100S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM78395C	NMNM02874A	300452025200S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM78395C	NMNM01074	300452140500S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM78395D	NMNM01051	300453468200S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM78408A	NMSF080670	300390693700C1	RIO ARRIBA	USFS	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM78410A	NMNM03863	300393036100C2	RIO ARRIBA	USFS	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM78411B	NMSF080516A	300392384700S1	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW

Number of Wells Hydraulically Fractured and Relationship to Underground Sources of Drinking Water  
(706 well sample)

Field Office	Operator	Case Number	Lease Number	American Petroleum Institute Number	County	Surface Management Entity	Oil or Gas Well	Hydraulically Fractured?	Relationship to an Underground Source of Drinking Water (USDW)
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM78412A	NMSF079049C	300390709900C2	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM78412A	NMSF079363	300390710700C1	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM78412A	NMSF079193	300390738700S1	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM78412A	NMSF079051	300392761300C2	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM78412C	NMSF079365	300393069400C1	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM78412C	NMNM013656	300392547400C1	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM78417A	NMSF078423	300392613800S1	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM78417A	NMSF078503	300390756900S1	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM78417A	NMSF078503A	300392163300S1	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM78417B	NMSF078945	300392745800C1	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM78420A	NMSF080713	300393083400C2	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM78420A	NMSF080712A	300392194000S1	RIO ARRIBA	Non-Federal	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM78420A	NMSF080712A	300392194000S1	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM78420D	NMSF080713	300393087300C1	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM83977	NMSF078129	300452701900S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM83988	NMSF078138	300453083900C2	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM84003	NMSF081078	300452687900S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM86311	NMSF077386A	300450636600S2	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMSF078115	NMSF078115	300452724700S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMSF078200A	NMSF078200A	300453330600C2	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMSF078204	NMSF078204	300452386200C1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMSF078421	NMSF078421	300450635900S2	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMSF078499A	NMSF078499A	300453117900C2	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMSF078566A	NMSF078566A	300452644400C1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMSF080376A	NMSF080376A	300452299100S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	CHEVRON MIDCONTINENT, LP	NMNM78406A	NMSF079366	300396009300D2	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	COLEMAN OIL & GAS INCORPORATED	NMNM100807	NMNM100807	300453274000S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	COLEMAN OIL & GAS INCORPORATED	NMNM104607	NMNM104607	300453382700S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	CONOCOPHILLIPS COMPANY	NMNM012698	NMNM012698	300392975700C1	RIO ARRIBA	Non-Federal	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	CONOCOPHILLIPS COMPANY	NMNM73387	NMSF078146	300453338700C2	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	CONOCOPHILLIPS COMPANY	NMNM73433	NMSF078097	300451017500C1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	CONOCOPHILLIPS COMPANY	NMNM73973	NMNM03553	300392671600C1	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	CONOCOPHILLIPS COMPANY	NMNM76141	NMNM03567	300452314600C1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	CONOCOPHILLIPS COMPANY	NMNM78413A	NMSF078570	300393040700C2	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	CONOCOPHILLIPS COMPANY	NMNM78413A	NMSF078972	300392582000C2	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	CONOCOPHILLIPS COMPANY	NMNM78413A	NMSF078640	300393063100C2	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	CONOCOPHILLIPS COMPANY	NMNM78413A	NMSF078417	300392220900D1	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	CONOCOPHILLIPS COMPANY	NMNM78413B	NMSF078500A	300390736700C2	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	CONOCOPHILLIPS COMPANY	NMNM78413B	NMSF078496	300390726500C2	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	CONOCOPHILLIPS COMPANY	NMNM78415B	NMSF078282	300392753800C1	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW

Number of Wells Hydraulically Fractured and Relationship to Underground Sources of Drinking Water  
(706 well sample)

Field Office	Operator	Case Number	Lease Number	American Petroleum Institute Number	County	Surface Management Entity	Oil or Gas Well	Hydraulically Fractured?	Relationship to an Underground Source of Drinking Water (USDW)
Farmington	CONOCOPHILLIPS COMPANY	NMNM78419A	NMSF080538	300390785100S1	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	CONOCOPHILLIPS COMPANY	NMNM78419A	NMSF080538	300392570600C2	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	CONOCOPHILLIPS COMPANY	NMNM78419A	NMSF080538	300392677600C2	RIO ARRIBA	USFS	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	CONOCOPHILLIPS COMPANY	NMNM78419B	NMSF080538	300392615800C1	RIO ARRIBA	USFS	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	CONOCOPHILLIPS COMPANY	NMNM78421A	NMNM012735	300392648100C2	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	CONOCOPHILLIPS COMPANY	NMNM78421A	NMSF078999	300393001300C2	RIO ARRIBA	Non-Federal	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	CONOCOPHILLIPS COMPANY	NMNM78421C	NMSF078995	300392740000S1	RIO ARRIBA	Non-Federal	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	CONOCOPHILLIPS COMPANY	NMNM78423C	NMSF078459	300453015700C1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	CONOCOPHILLIPS COMPANY	NMNM78423C	NMSF078543	300452477700S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	CONOCOPHILLIPS COMPANY	NMNM78424A	NMSF079004	300453405800S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	CONOCOPHILLIPS COMPANY	NMSF077106	NMSF077106	300452388800C1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	CONOCOPHILLIPS COMPANY	NMSF077106	NMSF077106	300453090300C1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	CONOCOPHILLIPS COMPANY	NMSF077107	NMSF077107	300450705600S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	CONOCOPHILLIPS COMPANY	NMSF078194	NMSF078194	300452866600S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	CONOCOPHILLIPS COMPANY	NMSF080245	NMSF080245	300452416100C1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	DEVON ENERGY PRODUCTION CO LP	NMNM78402A	NMSF079053	300390778500S1	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	DEVON ENERGY PRODUCTION CO LP	NMNM78402A	NMSF078615A	300452204400S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	DEVON ENERGY PRODUCTION CO LP	NMNM78402A	NMSF078970	300453136500C2	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	DEVON ENERGY PRODUCTION CO LP	NMNM78402A	NMSF079010	300393014901D2	RIO ARRIBA	BOR	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	DEVON ENERGY PRODUCTION CO LP	NMNM78402C	NMNM03357	3003922705100C1	SAN JUAN	BOR	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	DUGAN PRODUCTION CORPORATION	NMNM012737	NMNM012737	300452963900C2	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	DUGAN PRODUCTION CORPORATION	NMNM048989	NMNM048989	300453433400S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	DUGAN PRODUCTION CORPORATION	NMNM6899	NMNM6899	300452418600S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	ELM RIDGE RESOURCES INC	NMSF079161	NMSF079161	300392143900D1	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	ENERGEN RESOURCES CORPORATION	NMNM012202	NMNM012202	300453310800S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	ENERGEN RESOURCES CORPORATION	NMNM118661	NMSF078936	300450682600S2	SAN JUAN	BIA	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	ENERGEN RESOURCES CORPORATION	NMNM73594	NMSF044535B	300450750100S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	ENERGEN RESOURCES CORPORATION	NMNM99462	NMNM28812	300392478600S1	RIO ARRIBA	USFS	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	ENERGEN RESOURCES CORPORATION	NMSF078050	NMSF078050	300450686400C1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	ENERGEN RESOURCES CORPORATION	NMSF078197	NMSF078197	300452156900D2	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	ENERGEN RESOURCES CORPORATION	NMSF080776	NMSF080776	300453326300S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	ENERGEN RESOURCES CORPORATION	NMSF080917	NMSF080917	300453352400S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	FOUR STAR OIL GAS COMPANY	NMSF079298C	NMSF079298C	300390699100S1	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	HUNTINGTON ENERGY LLC	NMSF078886	NMSF078886	300390544100D1	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	KUKUI OPERATING COMPANY	NMSF077382	NMSF077382	300452845000S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	MCELVAIN OIL & GAS PROPERTIES	NMNM76407	NMSF080136	300392376500D2	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	MERRION OIL & GAS CORP	NMNM31059	NMNM31059	300453029200S1	SAN JUAN	BIA	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	NOBLE ENERGY INC	NMNM73667	NMNM059848	300453225400C2	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	PHOENIX HYDROCARBONS OPER CORP	NMSF078476	NMSF078476	300452914900S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW



Number of Wells Hydraulically Fractured and Relationship to Underground Sources of Drinking Water  
(706 well sample)

Field Office	Operator	Case Number	Lease Number	American Petroleum Institute Number	County	Surface Management Entity	Oil or Gas Well	Hydraulically Fractured?	Relationship to an Underground Source of Drinking Water (USDW)
Farmington	RICHARDSON OPERATING CO	NMNM013860A	NMNM013860A	300453199800S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	ROBERT L BAYLESS PRODUCER LLC	NMNM047	NMNM047	300453022400S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	ROBERT L BAYLESS PRODUCER LLC	NMNM047	NMNM047	300452992300C2	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	RODDY PRODUCTION CO LLC	NMNM020496	NMNM020496	300453414900S1	SAN JUAN	BIA	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	WILLIAMS PRODUCTION CO LLC	NMNM78388A	NMNM03189	300451149500S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	WILLIAMS PRODUCTION CO LLC	NMNM78407A	NMSF078767	300392627400S1	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	WILLIAMS PRODUCTION CO LLC	NMNM78407D	NMSF078770	300392459600S1	RIO ARRIBA	USFS	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	WILLIAMS PRODUCTION CO LLC	NMNM78407X	NMSF078771	300393093700S1	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	WILLIAMS PRODUCTION CO LLC	NMSF078767	NMSF078767	300393033600C2	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	XTO ENERGY INC	NMNM020501	NMNM020501	300452439500S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	XTO ENERGY INC	NMNM020501	NMNM020501	300453204700S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	XTO ENERGY INC	NMNM03380	NMNM03380	300450645300C1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	XTO ENERGY INC	NMNM03381	NMNM03381	300392733000C2	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	XTO ENERGY INC	NMNM03551	NMNM03551	300390669100S1	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	XTO ENERGY INC	NMNM03553	NMNM03553	300392110500C1	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	XTO ENERGY INC	NMNM73676	NMSF077329	300450656300S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	XTO ENERGY INC	NMNM95705	NMNM86494	300453157100S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	XTO ENERGY INC	NMSF077384	NMSF077384	300453003700S1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	XTO ENERGY INC	NMSF078641	NMSF078641	300453165600C2	SAN JUAN	BIA	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	XTO ENERGY INC	NMSF079162	NMSF079162	300390653300S1	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	XTO ENERGY INC	NMSF079186	NMSF079186	300392767600C2	RIO ARRIBA	BLM	Gas	yes	***Fractured, but not in, below or near an USDW
Farmington	XTO ENERGY INC	NMSF079232	NMSF079232	300453115400C1	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Farmington	XTO ENERGY INC	NMSF079232	NMSF079232	300450620000C2	SAN JUAN	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Hobbs	CONOCOPHILLIPS COMPANY	NMLC032099B	NMLC032099B	300253321000S1	LEA	Non-Federal	Gas	Yes	***Fractured, but not in, below or near an USDW
Hobbs	EOG RESOURCES INCORPORATED	NMNM114176	NMNM049943	300252844200S2	LEA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Hobbs	LOEB HERMAN L, LLC	NMNM4353	NMNM4353	300252549800S1	LEA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Hobbs	PECOS OPERATING COMPANY LLC	NMNM70796A	NMNM2386A	300252489300S1	LEA	Non-Federal	Gas	Yes	***Fractured, but not in, below or near an USDW
Hobbs	REMUDA OPERATING COMPANY	NMNM13125	NMNM13125	300252382600S1	LEA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Hobbs	XTO ENERGY INCORPORATED	NMNM71132	NMLC032545B	300253364600S1	LEA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Rio Puerco	ELM RIDGE RESOURCES INC	NMNM073751	NMSF080515B	300390511700S1	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Rio Puerco	ELM RIDGE RESOURCES INC	NMSF079354A	NMSF079354A	300390539400S1	RIO ARRIBA	Non-Federal	Gas	Yes	***Fractured, but not in, below or near an USDW
Rio Puerco	ENERGEN RESOURCES CORP	NMNM28715	NMNM28715	300392166600S1	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Rio Puerco	ENERGEN RESOURCES CORP	NMNM78399A	NMSF078912	300392238300S1	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Rio Puerco	ENERGEN RESOURCES CORP	NMSF079609	NMSF079609	300392349300C2	RIO ARRIBA	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Roswell	LIME ROCK RESOURCES A LP	NMNM32324	NMNM32324	300056186400S1	CHAVES	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Roswell	LIME ROCK RESOURCES A LP	NMNM33266	NMNM33266	300056076900S1	CHAVES	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Roswell	LIME ROCK RESOURCES A LP	NMNM36408	NMNM36408	300056341300S1	CHAVES	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Roswell	LIME ROCK RESOURCES A LP	NMNM72233	NMNM40029	300056106500S1	CHAVES	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Roswell	LIME ROCK RESOURCES A LP	NMNM72461	NMNM40030	300056151800S1	CHAVES	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW

Number of Wells Hydraulically Fractured and Relationship to Underground Sources of Drinking Water  
(706 well sample)

Field Office	Operator	Case Number	Lease Number	American Petroleum Institute Number	County	Surface Management Entity	Oil or Gas Well	Hydraulically Fractured?	Relationship to an Underground Source of Drinking Water (USDW)
Roswell	THREE RIVERS OPERATING CO LLC	NMNM0559993	NMNM0559993	300056371200S1	CHAVES	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Roswell	YATES PETROLEUM CORPORATION	NMNM10588	NMNM10588	300056344400S1	CHAVES	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Roswell	YATES PETROLEUM CORPORATION	NMNM11593	NMNM11593	300056285800S1	CHAVES	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Roswell	YATES PETROLEUM CORPORATION	NMNM27970	NMNM27970	300056120900S1	CHAVES	Non-Federal	Gas	Yes	***Fractured, but not in, below or near an USDW
Roswell	YATES PETROLEUM CORPORATION	NMNM28171	NMNM28171	300056339200C1	CHAVES	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Roswell	YATES PETROLEUM CORPORATION	NMNM28171	NMNM28171	300056257500S1	CHAVES	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Roswell	YATES PETROLEUM CORPORATION	NMNM72257	NMNM28305	300056159100S1	CHAVES	BLM	Gas	yes	***Fractured, but not in, below or near an USDW
Moab	LONE MOUNTAIN PRODUCTION CO	UTU38033	UTU38033	430193077300S1	GRAND	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Price	BILL BARRETT CORPORATION	UTU63014D	UTU0681	430073147600S1	CARBON	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Price	BILL BARRETT CORPORATION	UTU79487H	UTU73670	430073082800S1	CARBON	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Vernal	EOG RESOURCES INC	UTU41368	UTU41368	430473356200S1	UINTAH	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Vernal	EOG RESOURCES INC	UTU63013BF	UTU0281	430473600100S1	UINTAH	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Vernal	EOG RESOURCES INC	UTU63013BF	UTU0283A	430473697600S1	UINTAH	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Vernal	EOG RESOURCES INC	UTU63013BF	UTU0285A	430473600500S1	UINTAH	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Vernal	EOG RESOURCES INC	UTU63013BF	UTU0336A	430474004300S1	UINTAH	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Vernal	EOG RESOURCES INC	UTU63013BF	UTU0337	430473548000S1	UINTAH	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Vernal	EOG RESOURCES INC	UTU63013BF	UTU0336B	430473987200S1	UINTAH	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Vernal	EOG RESOURCES INC	UTU63013BF	UTU0336	430473522600S1	UINTAH	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Vernal	EOG RESOURCES INC	UTU63013BM	UTU0283A	430473295300S1	UINTAH	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Vernal	EOG RESOURCES INC	UTU63013BM	UTU0336A	430473963900S1	UINTAH	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Vernal	EOG RESOURCES INC	UTU76042	UTU76042	430473895900S1	UINTAH	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Vernal	KERR MCGEE OIL & GAS ONSHORE L	UTU469	UTU469	430473571600S1	UINTAH	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Vernal	KERR MCGEE OIL & GAS ONSHORE L	UTU63047A	UTU4485	430473307100S1	UINTAH	Non-Federal	Gas	Yes	***Fractured, but not in, below or near an USDW
Vernal	KERR MCGEE OIL & GAS ONSHORE L	UTU63047A	UTU01393D	430473746800S1	UINTAH	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Vernal	KERR MCGEE OIL & GAS ONSHORE L	UTU63047A	UTU01791	430473049800S1	UINTAH	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Vernal	KERR MCGEE OIL & GAS ONSHORE L	UTU63047A	UTU01791	430473204900S1	UINTAH	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Vernal	KERR MCGEE OIL & GAS ONSHORE L	UTU63047A	UTU0149079	430473528400S1	UINTAH	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Vernal	KERR MCGEE OIL & GAS ONSHORE L	UTU63047A	UTU02270A	430473520000S1	UINTAH	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Vernal	KERR MCGEE OIL & GAS ONSHORE L	UTU63047A	UTU01191	430473710000S1	UINTAH	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Vernal	KERR MCGEE OIL & GAS ONSHORE L	UTU63047A	UTU01191	430473852000S1	UINTAH	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Vernal	KERR MCGEE OIL & GAS ONSHORE L	UTU63047A	UTU0582	430473701900S1	UINTAH	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Vernal	KERR MCGEE OIL & GAS ONSHORE L	UTU63047A	UTU0576	430473415900S1	UINTAH	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Vernal	KERR MCGEE OIL & GAS ONSHORE L	UTU63047A	UTU0359	430473599000S1	UINTAH	BIA	Gas	Yes	***Fractured, but not in, below or near an USDW
Vernal	KERR MCGEE OIL & GAS ONSHORE L	UTU71417	UTU71417	430473812300S1	UINTAH	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Vernal	QEP ENERGY COMPANY	UTU73686	UTU73686	430473471000S1	UINTAH	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Vernal	XTO ENERGY INC	UTU73011	UTU73011	430473251500S1	UINTAH	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Vernal	XTO ENERGY INC	UTU81878E	UTU34350	430473689200S1	UINTAH	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Vernal	XTO ENERGY INC	UTU81878E	UTU73436	430473850400S1	UINTAH	BLM	Gas	Yes	***Fractured, but not in, below or near an USDW
Anchorage	MARATHON ALASKA PRODUCTION LLC	891006367A	AKA028055	501332035100D2	KENAI	Non-Federal	Gas	No	Not Fractured



Number of Wells Hydraulically Fractured and Relationship to Underground Sources of Drinking Water  
(706 well sample)

Field Office	Operator	Case Number	Lease Number	American Petroleum Institute Number	County	Surface Management Entity	Oil or Gas Well	Hydraulically Fractured?	Relationship to an Underground Source of Drinking Water (USDW)
Anchorage	MARATHON ALASKA PRODUCTION LLC	891008868A	AKA028083	501332052500S1	KENAI	USFWS	Gas	No	Not Fractured
Jackson	CHESAPEAKE OPERATING INC	LABLMA24527	LABLMA24527	170150147900S3	BOSSIER	MILITARY	Gas	No	Not Fractured
Milwaukee	COLLINS-MCGREGOR OPERATING	OHES50422	OHES50422	341672683900S1	WASHINGTON	USFS	Gas	No	Not Fractured
Great Falls	CROFT PETROLEUM COMPANY	MTM69622	MTM37937	251012226100S1	TOOLE	Non-Federal	Gas	No	Not Fractured
Great Falls	DEVON ENERGY PRODUCTION CO.	MTM68692H	MTM1492	250052246600S1	BLAINE	Non-Federal	Gas	No	Not Fractured
Miles City	FIDELITY EXPL & PROD CO	MTM93119	MTM62338	250032174700S1	BIG HORN	Non-Federal	Gas	No	Not Fractured
Farmington	BP AMERICA PRODUCTION CO.	NMSF078040	NMSF078040	300452800400S1	SAN JUAN	BLM	Gas	No	Not Fractured
Farmington	CONOCOPHILLIPS COMPANY	NMNM78415D	NMSF081114	300392508100S1	RIO ARRIBA	BLM	Gas	No	Not Fractured
Farmington	CONOCOPHILLIPS COMPANY	NMNM78416E	NMNM012698	300392785900S1	RIO ARRIBA	Non-Federal	Gas	No	Not Fractured
Farmington	CONOCOPHILLIPS COMPANY	NMNM78424B	NMSF079047	300452813200S1	SAN JUAN	BLM	Gas	No	Not Fractured
Farmington	CONOCOPHILLIPS COMPANY	NMSF078542	NMSF078542	300452882200S1	SAN JUAN	BLM	Gas	No	Not Fractured
Farmington	DEVON ENERGY PRODUCTION CO LP	NMNM78402D	NMSF079001A	300393030801S1	RIO ARRIBA	BOR	Gas	No	Not Fractured
Farmington	DEVON ENERGY PRODUCTION CO LP	NMNM78402D	NMSF079042	300453237500S1	SAN JUAN	BOR	Gas	No	Not Fractured
Farmington	ENERVEST OPERATING LLC	NMSF078505	NMSF078505	300453256100S1	SAN JUAN	BLM	Gas	No	Not Fractured
Farmington	KUKUI OPERATING COMPANY	NMNM84064	NMSF079596	300453164200S1	SAN JUAN	BLM	Gas	No	Not Fractured
Farmington	KUKUI OPERATING COMPANY	NMSF077382	NMSF077382	300453171300S1	SAN JUAN	BLM	Gas	No	Not Fractured
Farmington	XTO ENERGY INC	NMNM013642	NMNM013642	300452801100S1	SAN JUAN	BLM	Gas	No	Not Fractured
Tulsa	ELLORA OPERATING LP	TXNM99997	TXNM25666	424193073500S1	SHELBY	USFS	Gas	No	Not Fractured
Moab	HANCOCK BURTON W	UTU04955	UTU04955	430191548300S1	GRAND	BLM	Gas	No	Not Fractured
Moab	RUNNING FOXES PETROLEUM INC	UTU0148171B	UTU0148171B	430193099300S1	GRAND	BLM	Gas	No	Not Fractured
Moab	RUNNING FOXES PETROLEUM INC	UTU75141	UTU75141	430193061100S1	GRAND	BLM	Gas	No	Not Fractured
Moab	SCHUSTER HOMES INC	UTU32574	UTU32574	430193069100S1	GRAND	BLM	Gas	No	Not Fractured
Buffalo	ANADARKO PETROLEUM CORP	WYW149537A	WYW134242	490192146000S1	JOHNSON	BLM	Gas	No	Not Fractured
Buffalo	ANADARKO PETROLEUM CORP	WYW168720	WYW134922	490192606800S1	JOHNSON	Non-Federal	Gas	No	Not Fractured
Buffalo	LANCE OIL + GAS CO INC	WYW131201	WYW131201	490054605100S1	CAMPBELL	Non-Federal	Gas	No	Not Fractured
Buffalo	LANCE OIL + GAS CO INC	WYW132917	WYW132917	490055021400S1	CAMPBELL	Non-Federal	Gas	No	Not Fractured
Buffalo	LANCE OIL + GAS CO INC	WYW143991	WYW143991	490054826000S1	CAMPBELL	Non-Federal	Gas	No	Not Fractured
Buffalo	LANCE OIL + GAS CO INC	WYW146294	WYW146294	490332580000S1	SHERIDAN	Non-Federal	Gas	No	Not Fractured
Buffalo	LS ENERGY CORPORATION	WYW141872	WYW141872	490192899200S1	JOHNSON	Non-Federal	Gas	No	Not Fractured
Buffalo	MEDALLION EXPLORATION	WYW112922	WYW112922	490053041000S1	CAMPBELL	Non-Federal	Gas	No	Not Fractured
Buffalo	PATRIOT ENERGY RESOURCES LLC	WYW159927	WYW0203041	490054904900S1	CAMPBELL	Non-Federal	Gas	No	Not Fractured
Buffalo	PATRIOT ENERGY RESOURCES LLC	WYW80556	WYW80556	490054728200S1	CAMPBELL	Non-Federal	Gas	No	Not Fractured
Buffalo	PURE PETROLEUM LLC	WYW047610	WYW047610	490054354300S1	CAMPBELL	Non-Federal	Gas	No	Not Fractured
Buffalo	PURE PETROLEUM LLC	WYW96888	WYW96888	490053818500S1	CAMPBELL	Non-Federal	Gas	No	Not Fractured
Buffalo	RESOLUTE WYOMING, INC	WYW157482	WYW0103392	490053743200S1	CAMPBELL	Non-Federal	Gas	No	Not Fractured
Buffalo	USA EXPLORATION & PRODUCTION,	WYW3108	WYW3108	490053763600S1	CAMPBELL	Non-Federal	Gas	No	Not Fractured
Buffalo	WOLD OIL PROPERTIES, INC	WYW62643	WYW62643	490192687900S1	JOHNSON	BLM	Gas	No	Not Fractured
Buffalo	YATES PETROLEUM CORPORATION	WYW133605	WYW133605	490055558500S1	CAMPBELL	Non-Federal	Gas	No	Not Fractured
Buffalo	YATES PETROLEUM CORPORATION	WYW137115	WYW137115	490192581100S1	JOHNSON	Non-Federal	Gas	No	Not Fractured

Number of Wells Hydraulically Fractured and Relationship to Underground Sources of Drinking Water  
(706 well sample)

Field Office	Operator	Case Number	Lease Number	American Petroleum Institute Number	County	Surface Management Entity	Oil or Gas Well	Hydraulically Fractured?	Relationship to an Underground Source of Drinking Water (USDW)
Green River	CABOT OIL & GAS CORPORATION	WYW119581	WYW54465	490372248600S1	SWEETWATER	BLM	Gas	No	Not Fractured
Green River	WARREN E&P INCORPORATED	WYW160722A	WYW135071	490372609100S1	SWEETWATER	BLM	Gas	No	Not Fractured
Lander	BURLINGTON RESOURCES O&G CO	WYW109587X	WYW13290	490132238800S1	FREMONT	Non-Federal	Gas	No	Not Fractured
Lander	DEVON ENERGY PRODUCTION CO LP	WYW109416B	WYC048239	490130562400S1	FREMONT	BLM	Gas	No	Not Fractured
Newcastle	WESCO OPERATING INCORPORATED	WYC066289	WYC066289	490270560400S1	NIOBRARA	BLM	Gas	No	Not Fractured
Pinedale	EOG RESOURCES INCORPORATED	WYE022769A	WYE022769A	490350612000S1	SUBLETTE	BLM	Gas	No	Not Fractured
Pinedale	EOG RESOURCES INCORPORATED	WYW0256492	WYW0256492	490350568000S1	SUBLETTE	BLM	Gas	No	Not Fractured
Pinedale	EOG RESOURCES INCORPORATED	WYW109419X	WYW01332	490352137100S1	SUBLETTE	BLM	Gas	No	Not Fractured
Pinedale	EOG RESOURCES INCORPORATED	WYW109537B	WYW020123	490350533000S1	SUBLETTE	BLM	Gas	No	Not Fractured
Roswell	ROSWELL OPERATING LLC.	NMNM32323	NMNM32323	300056243200S1	CHAVES	BLM	Gas	No	Not Fractured
Tulsa	EL PASO E&P COMPANY, LP	TXNM75292	TXNM81996	424273292600S1	STARR	USFS	Gas	No	Not Fractured
Bakersfield	VINTAGE PRODUCTION CA LLC	CACA26739X	CAS019301C	040302148300S1	KERN	BLM	Oil	Yes	Fractured below an USDW
Canon City	CHEYENNE OIL PROPERTIES INC	COC51850X	COC37479	050090645400S1	BACA	USFS	Oil	Yes	Fractured below an USDW
Canon City	PETRO-CANADA RESOURCES	COC58278X	COC22405	051231394200S1	WELD	USFS	Oil	Yes	Fractured below an USDW
Milwaukee	PETROX INC	OHES52131	OHES52131	340732209800S1	HOCKING	USFS	Oil	Yes	Fractured below an USDW
Buffalo	ANADARKO E&P COMPANY LP	WYW109596D	WYB044668	490190519900S1	JOHNSON	Non-Federal	Oil	Yes	Fractured below an USDW
Buffalo	ANADARKO E&P COMPANY LP	WYW109720L	WYB037507	490190568900S2	JOHNSON	BLM	Oil	Yes	Fractured below an USDW
Buffalo	ANADARKO PETROLEUM CORP	8910210760	WYW21220	490053065200S1	CAMPBELL	Non-Federal	Oil	Yes	Fractured below an USDW
Buffalo	BLAKE, MARK A	WYW047611	WYW047611	490052148900S1	CAMPBELL	Non-Federal	Oil	Yes	Fractured below an USDW
Buffalo	ME OIL LTD LIABILITY CO	WYB044565	WYB044565	490190510800S1	JOHNSON	BLM	Oil	Yes	Fractured below an USDW
Buffalo	P&M PETROLEUM MGMT LLC	WYW29637	WYW29637	490052352700S1	CAMPBELL	Non-Federal	Oil	Yes	Fractured below an USDW
Buffalo	SM ENERGY COMPANY	WYW0314304	WYW0314304	490052470500S1	CAMPBELL	Non-Federal	Oil	Yes	Fractured below an USDW
Buffalo	SM ENERGY COMPANY	WYW110397	WYW60865	490052721100S1	CAMPBELL	Non-Federal	Oil	Yes	Fractured below an USDW
Buffalo	WHITING OIL & GAS CORP	WYW138274X	WYW47511	490192057500S1	JOHNSON	Non-Federal	Oil	Yes	Fractured below an USDW
Buffalo	WYOIL CORP	8910085270	WYW02065A	490190586200S1	JOHNSON	BLM	Oil	Yes	Fractured below an USDW
Casper	HOWELL PETROLEUM CORPORATION	WYW109800A	WYC036745	490252157000S1	NATRONA	BLM	Oil	Yes	Fractured below an USDW
Casper	HYPERION OIL & GAS LLC	WYW56933B	WYW56933B	490092292700S1	CONVERSE	Non-Federal	Oil	Yes	Fractured below an USDW
Casper	SUNSHINE VALLEY PETROLEUM CORP	WYW34687	WYW34687	490092039100S1	CONVERSE	USFS	Oil	Yes	Fractured below an USDW
Lander	PETROLEUM RESOURCE MANAGEMEN	WYW109516A	WYW18032	490132115100S1	FREMONT	BLM	Oil	Yes	Fractured below an USDW
Newcastle	CHEMILY MANAGEMENT COMPANY	WYW45675	WYW45675	490452153600S1	WESTON	Non-Federal	Oil	Yes	Fractured below an USDW
Newcastle	FARNSWORTH ENERGY LLC.	WYW21901	WYW21901	490452143900S1	WESTON	Non-Federal	Oil	Yes	Fractured below an USDW
Newcastle	KLABZUBA OIL & GAS INC	WYW55012	WYW55012	490272031600S1	NIOBRARA	BLM	Oil	Yes	Fractured below an USDW
Newcastle	M & K OIL COMPANY INCORPORATED	WYW133506	WYW133506	490452904200S1	WESTON	Non-Federal	Oil	Yes	Fractured below an USDW
Newcastle	ROCK WELL PETROLEUM (US) INC	8910085820	WYB022739H	490450761400S1	WESTON	BLM	Oil	Yes	Fractured below an USDW
Newcastle	SOONER OPERATING CO INC	WYW148196	WYW148196	490272677000S1	NIOBRARA	BLM	Oil	Yes	Fractured below an USDW
Newcastle	WELLSTAR CORPORATION	WYW27042	WYW27042	490052576800S1	CAMPBELL	BLM	Oil	Yes	Fractured below an USDW
Newcastle	WINTER RIDGE ENERGY LLC	891008664A	WYW04305	490450639800S1	WESTON	BLM	Oil	Yes	Fractured below an USDW
Newcastle	WINTER RIDGE ENERGY LLC	891008664A	WYW012451	490450637800S1	WESTON	Non-Federal	Oil	Yes	Fractured below an USDW
Pinedale	CHEVRON USA INC	WYW109425G	WYW026875	490350542300S1	SUBLETTE	BLM	Oil	Yes	Fractured below an USDW

Number of Wells Hydraulically Fractured and Relationship to Underground Sources of Drinking Water  
(706 well sample)

Field Office	Operator	Case Number	Lease Number	American Petroleum Institute Number	County	Surface Management Entity	Oil or Gas Well	Hydraulically Fractured?	Relationship to an Underground Source of Drinking Water (USDW)
Rawlins	MERIT ENERGY COMPANY	WYW109745X	WYC029520B	490372244800S1	SWEETWATER	BLM	Oil	Yes	Fractured below an USDW
Worland	CITATION OIL & GAS CORPORATION	WYC068665	WYC068665	490172044500S1	HOT SPRINGS	BLM	Oil	Yes	Fractured below an USDW
Worland	CITATION OIL & GAS CORPORATION	WYC068665	WYC068665	490172044500S1	HOT SPRINGS	BLM	Oil	Yes	Fractured below an USDW
Worland	CITATION OIL & GAS CORPORATION	WYC068665	WYC068665	490172035700D2	HOT SPRINGS	BLM	Oil	Yes	Fractured below an USDW
Worland	CITATION OIL & GAS CORPORATION	WYW109577A	WYC045855	490172002600S2	HOT SPRINGS	BLM	Oil	Yes	Fractured below an USDW
Worland	CITATION OIL & GAS CORPORATION	WYW112017X	WYW106210	490432066700S2	WASHAKIE	BLM	Oil	Yes	Fractured below an USDW
Worland	CONTINENTAL RESOURCES INC	WYW109468D	WYW03996	490430530200S1	WASHAKIE	BLM	Oil	Yes	Fractured below an USDW
Worland	CONTINENTAL RESOURCES INC	WYW109469X	WYW0325328	490432079200S1	WASHAKIE	BLM	Oil	Yes	Fractured below an USDW
Worland	CONTINENTAL RESOURCES INC	WYW150172	WYW0320078	490432039600S1	WASHAKIE	BLM	Oil	Yes	Fractured below an USDW
Worland	ENCORE ENERGY PARTNERS OPERATI	WYW109502B	MTBIL033864	250090505500S1	CARBON	BLM	Oil	Yes	Fractured below an USDW
Worland	MARATHON OIL COMPANY	WYC043977A	WYC043977A	490292073100A4	PARK	BLM	Oil	Yes	Fractured below an USDW
Worland	MARATHON OIL COMPANY	WYW109447X	WYC045662B	490032105900S1	BIG HORN	BLM	Oil	Yes	Fractured below an USDW
Worland	MARATHON OIL COMPANY	WYW109447X	WYC045662B	490030642000S1	BIG HORN	BLM	Oil	Yes	Fractured below an USDW
Worland	MARATHON OIL COMPANY	WYW109520A	WYC044769	490030627800S3	BIG HORN	BLM	Oil	Yes	Fractured below an USDW
Worland	MERIT ENERGY COMPANY	WYW138881X	WYC044140	490170566500S1	HOT SPRINGS	BLM	Oil	Yes	Fractured below an USDW
Bakersfield	CHEVRON U S A INCORPORATED	CAS019376	CAS019376	040303620900S1	KERN	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Bakersfield	CHEVRON U S A INCORPORATED	CAS019376	CAS019376	040300340400S1	KERN	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Bakersfield	HOLMES WESTERN OIL CORPORATION	CACA3279	CACA3279	040297311800S1	KERN	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Bakersfield	MACPHERSON OIL COMPANY	CACA34219X	CAS019701	040291821800S1	KERN	Non-Federal	Oil	Yes	***Fractured, but not in, below or near an USDW
Bakersfield	MACPHERSON OIL COMPANY	CACA34219X	CAS019847	040301774400S1	KERN	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Bakersfield	OCCIDENTAL ELK HILLS INC	CAS019343	CAS019343	040295120700S1	KERN	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Bakersfield	OCCIDENTAL ELK HILLS INC	CAS019343	CAS019343	040291117400S1	KERN	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Bakersfield	PLAINS EXPL & PROD CO	CAS019314A	CAS019314A	040303206000S1	KERN	Non-Federal	Oil	Yes	***Fractured, but not in, below or near an USDW
Bakersfield	SENECA RESOURCES CORPORATION	CALA0123733	CALA0123733	041110274400S1	VENTURA	USFS	Oil	Yes	***Fractured, but not in, below or near an USDW
Bakersfield	SENECA RESOURCES CORPORATION	CALA0149292	CALA0149292	041112027900S1	VENTURA	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Bakersfield	SENECA RESOURCES CORPORATION	CALA037880B	CALA037880B	041112001100S1	VENTURA	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Canon City	PETRO-CANADA RESOURCES	COC58278X	COC29692A	051231410500S1	WELD	USFS	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	ALAMO PERMIAN RESOURCES LLC	NMLC028936C	NMLC028936C	300150437200S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	ALAMO PERMIAN RESOURCES LLC	NMLC045818A	NMLC045818A	300150139600S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	APACHE CORPORATION	NMLC029395A	NMLC029395A	300152014200S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	APACHE CORPORATION	NMNM0467932	NMNM0467932	300153025500S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	APOLLO ENERGY L P	NMLC050797	NMLC050797	300150234600S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	APOLLO ENERGY L P	NMLC050797	NMLC050797	300150618800S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	APOLLO ENERGY L P	NMLC050797	NMLC050797	300150239300S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	ASHER ENTERPRISES LTD CO	NMNM70955X	NMLC028992G	300150433200S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	BOPCO LP	NMNM02918	NMNM02918	300153571200S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	BOPCO LP	NMNM02953C	NMNM02953C	300153103300C2	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	BOPCO LP	NMNM70965F	NMNM02884A	300153727300S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	BURNETT OIL COMPANY INC	NMLC029338A	NMLC029338A	300153244800C2	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW

Number of Wells Hydraulically Fractured and Relationship to Underground Sources of Drinking Water  
(706 well sample)

Field Office	Operator	Case Number	Lease Number	American Petroleum Institute Number	County	Surface Management Entity	Oil or Gas Well	Hydraulically Fractured?	Relationship to an Underground Source of Drinking Water (USDW)
Carlsbad	BURNETT OIL COMPANY INC	NMLC030570A	NMLC030570A	300153279300C1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	CBS OPERATING CORPORATION	NMNM101360X	NMLC056302B	300151027200S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	CFM OIL COMPANY, LOUIS FULTON	NMLC060122	NMLC060122	300150097000S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	CHESAPEAKE OPERATING INC	NMNM0415688A	NMNM0415688A	300153436000S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	CLAYTON WILLIAMS ENERGY, INC	NMNM14847	NMNM14847	300153166000S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	COG OPERATING LLC	NMNM074935	NMNM074935	300153542700S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	COG OPERATING LLC	NMNM71030C	NMNM98120	300153747400S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	COG OPERATING LLC	NMNM81622	NMNM81622	300153425400S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	COG OPERATING LLC	NMNM88525X	NMLC028784B	300153618100S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	COG OPERATING LLC	NMNM88525X	NMLC028793A	300152764600S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	COG OPERATING LLC	NMNM88525X	NMLC028793A	300153063300S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	DEVON ENERGY PRODUCTION CO L P	NMLC028755A	NMLC028755A	300153044000C2	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	DEVON ENERGY PRODUCTION CO L P	NMLC028755A	NMLC028755A	300153044000C2	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	DEVON ENERGY PRODUCTION CO L P	NMLC050158	NMLC050158	300153323500S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	DEVON ENERGY PRODUCTION CO L P	NMLC067849	NMLC067849	300153326200C2	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	DEVON ENERGY PRODUCTION CO L P	NMLC069274	NMLC069274	300150079900S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	DEVON ENERGY PRODUCTION CO L P	NMNM0405444	NMNM0405444	300153310500S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	DEVON ENERGY PRODUCTION CO L P	NMNM0405444A	NMNM0405444A	300152098600S1	EDDY	Non-Federal	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	DEVON ENERGY PRODUCTION CO L P	NMNM117945	NMNM81953	300153475600S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	DEVON ENERGY PRODUCTION CO L P	NMNM33437A	NMNM33437A	300152624500S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	DEVON ENERGY PRODUCTION CO L P	NMNM89156	NMNM89156	300152904900S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	ENDURANCE RESOURCES LLC	NMNM106714	NMNM106714	300152962400S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	ENDURANCE RESOURCES LLC	NMNM70930X	NMLC063613	300150458500S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	EXXONMOBIL CORPORATION	NMNM94450X	NMNM01119	300152868200S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	FAIRWAY RESOURCES	NMLC055561	NMLC055561	300153562000S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	FINNEY OIL COMPANY	NMLC067849	NMLC067849	300150061200S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	LIMEROCK RESOURCES A, L.P.	NMNM048344	NMNM048344	300153420000S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	LINN OPERATING INC.	NMLC029426B	NMLC029426B	300152829900S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	MACK ENERGY CORPORATION	NMNM77951X	NMNM05186	300152446400S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	MACK ENERGY CORPORATION	NMNM98171	NMNM98171	300153540900S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	NADEL AND GUSSMAN HEYCO, LLC	NMNM89879	NMNM89879	300153643900S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	NADEL AND GUSSMAN HEYCO, LLC	NMNM91308	NMNM91308	300152619700S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	OXY USA INC	NMNM38464	NMNM38464	300152724300S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	OXY USA INC	NMNM43744	NMNM43744	300152793600S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	OXY USA INC	NMNM43744	NMNM43744	300152749900S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	OXY USA INC	NMNM62589	NMNM62589	300153734000S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	SANDRIDGE EXPLORATION AND PROD	NMNM70993X	NMLC028978B	300150456300S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	ST MARY LAND & EXPLORATION CO	NMNM88491X	NMNM24160	300153307200S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	XTO ENERGY INC	NMNM70992C	NMNM19246	300152699200S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW

Number of Wells Hydraulically Fractured and Relationship to Underground Sources of Drinking Water  
(706 well sample)

Field Office	Operator	Case Number	Lease Number	American Petroleum Institute Number	County	Surface Management Entity	Oil or Gas Well	Hydraulically Fractured?	Relationship to an Underground Source of Drinking Water (USDW)
Carlsbad	YATES PETROLEUM CORPORATION	NMLC028990B	NMLC028990B	300152023400S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Carlsbad	YATES PETROLEUM CORPORATION	NMNM12832	NMNM12832	300152050700S1	EDDY	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM09979	NMNM09979	300452481600C2	SAN JUAN	BIA	Oil	Yes	***Fractured, but not in, below or near an USDW
Farmington	BURLINGTON RESOURCES O&G CO LP	NMNM73103	NMNM020982	300452572100S2	SAN JUAN	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Farmington	DUGAN PRODUCTION CORPORATION	NMNM29560	NMNM29560	300452443900S1	SAN JUAN	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Farmington	ENERGEN RESOURCES CORPORATION	NMSF080724A	NMSF080724A	300452550400S1	SAN JUAN	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Farmington	PARKER & PARKER OIL & GAS INC	NMNM58871	NMNM58871	300432094500S1	SANDOVAL	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Farmington	QUESTAR EXPL & PROD CO	NMSF078562	NMSF078562	300390538100S1	RIO ARRIBA	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Hobbs	APACHE CORPORATION	NMNM89874	NMNM89874	300250422800S1	LEA	Non-Federal	Oil	Yes	***Fractured, but not in, below or near an USDW
Hobbs	APACHE CORPORATION	NMNM90161	NMNM90161	300253588200S1	LEA	Non-Federal	Oil	Yes	***Fractured, but not in, below or near an USDW
Hobbs	CHESAPEAKE OPERATING INC	NMNM67986	NMNM67986	300252784600S2	LEA	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Hobbs	CHEVRON USA INCORPORATED	NMLC032104	NMLC032104	300252092400C1	LEA	Non-Federal	Oil	Yes	***Fractured, but not in, below or near an USDW
Hobbs	CHEVRON USA INCORPORATED	NMLC032104	NMLC032104	300251217700C2	LEA	Non-Federal	Oil	Yes	***Fractured, but not in, below or near an USDW
Hobbs	COG OPERATING LLC	NMLC029405A	NMLC029405A	300253872400S1	LEA	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Hobbs	COG OPERATING LLC	NMLC029405A	NMLC029405A	300253881400S1	LEA	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Hobbs	CONOCOPHILLIPS COMPANY	NMLC031740B	NMLC031740B	300253427000C2	LEA	Non-Federal	Oil	Yes	***Fractured, but not in, below or near an USDW
Hobbs	CONOCOPHILLIPS COMPANY	NMNM70987A	NMLC029509A	300250061100S1	LEA	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Hobbs	CONOCOPHILLIPS COMPANY	NMNM70987A	NMLC057210	300253787900S1	LEA	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Hobbs	CONOCOPHILLIPS COMPANY	NMNM70987A	NMLC059001	300252398400S1	LEA	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Hobbs	CONOCOPHILLIPS COMPANY	NMNM71052A	NMLC031670B	300250783000S1	LEA	Non-Federal	Oil	Yes	***Fractured, but not in, below or near an USDW
Hobbs	CONOCOPHILLIPS COMPANY	NMNM71052E	NMLC031670B	300252585400S3	LEA	Non-Federal	Oil	Yes	***Fractured, but not in, below or near an USDW
Hobbs	CONOCOPHILLIPS COMPANY	NMNM71052E	NMLC031695B	300252710500S1	LEA	Non-Federal	Oil	Yes	***Fractured, but not in, below or near an USDW
Hobbs	EOG RESOURCES INCORPORATED	NMLC064944	NMLC064944	300253058000C1	LEA	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Hobbs	J & J SERVICES INCORPORATED	NMNM04411	NMNM04411	300250270200S1	LEA	Non-Federal	Oil	Yes	***Fractured, but not in, below or near an USDW
Hobbs	J & J SERVICES INCORPORATED	NMNM04411	NMNM04411	300250270200S1	LEA	Non-Federal	Oil	Yes	***Fractured, but not in, below or near an USDW
Hobbs	LEGACY RESERVES OPERATING LP	NMNM71009X	NMLC064098	300250084500S1	LEA	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Hobbs	LEGACY RESERVES OPERATING LP	NMNM87877X	NMLC032511F	300253232100S1	LEA	Non-Federal	Oil	Yes	***Fractured, but not in, below or near an USDW
Hobbs	LINN OPERATING INCORPORATED	NMNM70989C	NMNM05519	300252179800S1	LEA	Non-Federal	Oil	Yes	***Fractured, but not in, below or near an USDW
Hobbs	MCELVAIN OIL & GAS PROP INC	NMNM0245247	NMNM0245247	300253804000S3	LEA	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Hobbs	MCELVAIN OIL & GAS PROP INC	NMNM0245247	NMNM0245247	300252905100S2	LEA	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Hobbs	NADEL & GUSSMAN HEYCO LLC	NMNM63365	NMNM63365	300253014600S1	LEA	Non-Federal	Oil	Yes	***Fractured, but not in, below or near an USDW
Hobbs	OCCIDENTAL PERMIAN LIMITED	NMNM71037D	NMNM0321613	300251111700S1	LEA	Non-Federal	Oil	Yes	***Fractured, but not in, below or near an USDW
Hobbs	TANDEM ENERGY CORPORATION	NMNM63368	NMNM63368	300253020900S1	LEA	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Roswell	CANO PETRO OF NM INC	NMNM14154	NMNM14154	300412044200S1	ROOSEVELT	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Vernal	CITATION OIL & GAS CORPORATION	UTU66837A	UTSL066312	430473154200S1	UINTAH	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Vernal	GASCO PRODUCTION COMPANY	UTU013429A	UTU013429A	430473135700S1	UINTAH	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Vernal	NEWFIELD EXPLORATION COMPANY	UTU87538X	UTU67170	430133325200S1	DUCHESNE	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Vernal	NEWFIELD EXPLORATION COMPANY	UTU87538X	UTU16535	430135024000S1	DUCHESNE	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Vernal	NEWFIELD EXPLORATION COMPANY	UTU87538X	UTU77233	430135002200S1	DUCHESNE	Non-Federal	Oil	Yes	***Fractured, but not in, below or near an USDW



Number of Wells Hydraulically Fractured and Relationship to Underground Sources of Drinking Water  
(706 well sample)

Field Office	Operator	Case Number	Lease Number	American Petroleum Institute Number	County	Surface Management Entity	Oil or Gas Well	Hydraulically Fractured?	Relationship to an Underground Source of Drinking Water (USDW)
Vernal	NEWFIELD EXPLORATION COMPANY	UTU87538X	UTU77233	430133158800S1	DUCHESNE	Non-Federal	Oil	Yes	***Fractured, but not in, below or near an USDW
Vernal	NEWFIELD EXPLORATION COMPANY	UTU87538X	UTU36846	430473619100S1	UINTAH	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Vernal	NEWFIELD EXPLORATION COMPANY	UTU87538X	UTU74826	430133217000S1	DUCHESNE	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Vernal	NEWFIELD EXPLORATION COMPANY	UTU87538X	UTU66184	430133245600S1	DUCHESNE	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Vernal	NEWFIELD EXPLORATION COMPANY	UTU87538X	UTU68548	430133266900S1	DUCHESNE	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Vernal	NEWFIELD EXPLORATION COMPANY	UTU87538X	UTU68548	430133398600S1	DUCHESNE	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Vernal	NEWFIELD EXPLORATION COMPANY	UTU87538X	UTU52018	430133303400S1	DUCHESNE	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Vernal	NEWFIELD EXPLORATION COMPANY	UTU87538X	UTU15855	430133318300S1	DUCHESNE	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Vernal	NEWFIELD EXPLORATION COMPANY	UTU87538X	UTU39713	430473574800S1	UINTAH	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Vernal	NEWFIELD EXPLORATION COMPANY	UTU87538X	UTU72106	430133263700S1	DUCHESNE	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Vernal	NEWFIELD EXPLORATION COMPANY	UTU87538X	UTU84233	430473926500S1	UINTAH	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Vernal	NEWFIELD EXPLORATION COMPANY	UTU87538X	UTU16540	430473611800S1	UINTAH	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Vernal	QEP ENERGY COMPANY	UTU28652	UTU28652	430473468500S1	UINTAH	BLM	Oil	Yes	***Fractured, but not in, below or near an USDW
Bakersfield	AERA ENERGY LLC	CACA28423	CACA28423	040303864500S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	AERA ENERGY LLC	CACA28423	CACA28423	040292130100S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	AERA ENERGY LLC	CACA28423	CACA28423	040298356800S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	AERA ENERGY LLC	CALA076208	CALA076208	040302227100S1	KERN	Non-Federal	Oil	No	Not Fractured
Bakersfield	AERA ENERGY LLC	CALA076208	CALA076208	040297041600S1	KERN	Non-Federal	Oil	No	Not Fractured
Bakersfield	AERA ENERGY LLC	CAS019357	CAS019357	040300355400S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	AERA ENERGY LLC	CAS019357	CAS019357	040301987600S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	AERA ENERGY LLC	CAS019392	CAS019392	040303961000S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	AERA ENERGY LLC	CAS019392	CAS019392	040303826300S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	AERA ENERGY LLC	CAS019392	CAS019392	040303825800S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	AERA ENERGY LLC	CAS019392	CAS019392	040296287900S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	AERA ENERGY LLC	CAS019392	CAS019392	040297578500S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	AERA ENERGY LLC	CAS019392	CAS019392	040302003100X1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	AERA ENERGY LLC	CAS021592	CAS021592	040291379000S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	AERA ENERGY LLC	CAS021592	CAS021592	040300795100S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	AERA ENERGY LLC	CAS021592	CAS021592	040296002801S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	AERA ENERGY LLC	CAS021592	CAS021592	040297445300S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	AERA ENERGY LLC	CAS021592	CAS021592	040298144001S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	AERA ENERGY LLC	CAS021593	CAS021593	040298685800S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	BERRY PETROLEUM COMPANY	CAS019636	CAS019636	040304171700S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	BERRY PETROLEUM COMPANY	CAS019850C	CAS019850C	040291472500S2	KERN	Non-Federal	Oil	No	Not Fractured
Bakersfield	BERRY PETROLEUM COMPANY	CAS037269	CAS037269	040303570100S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	BERRY PETROLEUM COMPANY	CAS037269	CAS037269	040295655700S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	CHEVRON U S A INCORPORATED	CAS019349	CAS019349	040295033900S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	CHEVRON U S A INCORPORATED	CAS019349	CAS019349	040296571000S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	CHEVRON U S A INCORPORATED	CAS019381A	CAS019381A	040292316400S1	KERN	BLM	Oil	No	Not Fractured



Number of Wells Hydraulically Fractured and Relationship to Underground Sources of Drinking Water  
(706 well sample)

Field Office	Operator	Case Number	Lease Number	American Petroleum Institute Number	County	Surface Management Entity	Oil or Gas Well	Hydraulically Fractured?	Relationship to an Underground Source of Drinking Water (USDW)
Bakersfield	CHEVRON U S A INCORPORATED	CAS019381A	CAS019381A	040300493500S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	CHEVRON U S A INCORPORATED	CAS019382	CAS019382	040297165600S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	CHEVRON U S A INCORPORATED	CAS019382	CAS019382	040297166500S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	CHEVRON U S A INCORPORATED	CAS019382	CAS019382	040303990200S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	CHEVRON U S A INCORPORATED	CAS019382	CAS019382	040297166800S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	CHEVRON U S A INCORPORATED	CAS019382	CAS019382	040300833800S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	CHEVRON U S A INCORPORATED	CAS019382	CAS019382	040298612000S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	CHEVRON U S A INCORPORATED	CAS019382	CAS019382	040302031400S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	CHEVRON U S A INCORPORATED	CAS019382	CAS019382	040301306500S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	CHEVRON U S A INCORPORATED	CAS019382	CAS019382	040300951800S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	CHEVRON U S A INCORPORATED	CAS019382	CAS019382	040296272200S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	CHEVRON U S A INCORPORATED	CAS064676	CAS064676	040301193100S1	KERN	Non-Federal	Oil	No	Not Fractured
Bakersfield	H L HALL & SONS	CALA032837	CALA032837	040292532800S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	HOLMES BRUCE A	CALA033054	CALA033054	040302289000S1	KERN	Non-Federal	Oil	No	Not Fractured
Bakersfield	HOLMES WESTERN OIL CORPORATION	CALA033068	CALA033068	040300399500S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	HOLMES WESTERN OIL CORPORATION	CALA033068	CALA033068	040291935300S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	HOLMES WESTERN OIL CORPORATION	CAS066175	CAS066175	040310004600S1	KINGS	Non-Federal	Oil	No	Not Fractured
Bakersfield	OCCIDENTAL ELK HILLS INC	CAS019383C	CAS019383C	040293718500S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	PETRO RESOURCES INCORPORATED	CAS036952	CAS036952	040296989900S1	KERN	Non-Federal	Oil	No	Not Fractured
Bakersfield	PLAINS EXPL & PROD CO	CACA24529X	CAS020995	040296741200S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	PLAINS EXPL & PROD CO	CAS019642	CAS019642	040304153600S1	KERN	BLM	Oil	No	Not Fractured
Bakersfield	TERMO COMPANY	CAS5672	CAS5672	040371169300S1	LOS ANGELES	BLM	Oil	No	Not Fractured
Bakersfield	TERMO COMPANY	CAS5672	CAS5672	040372233600S1	LOS ANGELES	BLM	Oil	No	Not Fractured
Bakersfield	VINTAGE PETROLEUM LLC	CALA055052	CALA055052	041110323600S1	VENTURA	BLM	Oil	No	Not Fractured
Bakersfield	VINTAGE PETROLEUM LLC	CAS037936	CAS037936	040294663800S1	KERN	Non-Federal	Oil	No	Not Fractured
Craig	BONANZA CREEK ENERGY OP CO LLC	COC47650C	COD028963	050570636700S1	JACKSON	BLM	Oil	No	Not Fractured
Meeker	C&J FIELD SERVICES	COC034894	COC034894	051030793100S1	RIO BLANCO	BLM	Oil	No	Not Fractured
Jackson	TEXAS PETROLEUM INVESTMENT	LAES380061	LABLMFW13046	170750067300S3	PLAQUEMINES ON	USFWS	Oil	No	Not Fractured
Jackson	XTO ENERGY INCORPORATED	LAES45338	LAES25317	170272181500S1	CLAIBORNE	USFS	Oil	No	Not Fractured
Dickinson	ENCORE OPERATING LP	NDM82212	NDM32739	330530141200S1	MCKENZIE	USFS	Oil	No	Not Fractured
Dickinson	HESS CORPORATION	891012493A	NDBLMA025902A	330070002800S1	BILLINGS	USFS	Oil	No	Not Fractured
Dickinson	PETRO-HUNT LLC	891008777A	NDBLM016442	330530281300S1	MCKENZIE	USFS	Oil	No	Not Fractured
Dickinson	ST MARY LAND & EXPL CO	NDM85685X	NDM85005	330530078200S1	MCKENZIE	USFS	Oil	No	Not Fractured
Miles City	ENCORE OPERATING LP	8920008660	MTBIL042114A	250792103300S2	PRAIRIE	Non-Federal	Oil	No	Not Fractured
Miles City	ENCORE OPERATING LP	892000866A	MTBIL041195A	251090511900S1	WIBAUX	BLM	Oil	No	Not Fractured
Miles City	ENCORE OPERATING LP	MTM82041	MTBIL036587A	250252159500S1	FALLON	Non-Federal	Oil	No	Not Fractured
Miles City	ENCORE OPERATING LP	MTM91311	MTBIL025077B	250252196200S1	FALLON	BLM	Oil	No	Not Fractured
Moab	SOAL LLC	UTU15049	UTU15049	430193080000S1	GRAND	BLM	Oil	No	Not Fractured
Salt Lake	WOLVERINE GAS & OIL CO OF UT	UTU80800A	UTU73528	430413003300S1	SEVIER	BLM	Oil	No	Not Fractured

Number of Wells Hydraulically Fractured and Relationship to Underground Sources of Drinking Water  
(706 well sample)

Field Office	Operator	Case Number	Lease Number	American Petroleum Institute Number	County	Surface Management Entity	Oil or Gas Well	Hydraulically Fractured?	Relationship to an Underground Source of Drinking Water (USDW)
Vernal	QEP ENERGY COMPANY	UTU67951A	UTU68219	430473492700S1	UINTAH	BLM	Oil	No	Not Fractured
Buffalo	ABRAXAS PETROLEUM CORPORATION	8910210950	WYW040443D	490050562500S1	CAMPBELL	BLM	Oil	No	Not Fractured
Buffalo	ADAMS H D & CAROLYN B	WYW25963	WYW25963	490452151200S1	CONVERSE	Non-Federal	Oil	No	Not Fractured
Buffalo	ANADARKO E&P COMPANY LP	WYW109720W	WYB041577	490190557300S1	JOHNSON	Non-Federal	Oil	No	Not Fractured
Buffalo	ANADARKO E&P COMPANY LP	WYW109753A	WYB042385	490192056300S1	JOHNSON	BLM	Oil	No	Not Fractured
Buffalo	CITATION OIL & GAS CORPORATION	WYW58944	WYW58944	490052685800S1	CAMPBELL	BLM	Oil	No	Not Fractured
Buffalo	P&M PETROLEUM MGMT LLC	8910124700	WYW2488	490052133600S1	CAMPBELL	Non-Federal	Oil	No	Not Fractured
Buffalo	PATHFINDER ENERGY INC	WYW48676	WYW48676	490052862500S1	CAMPBELL	Non-Federal	Oil	No	Not Fractured
Buffalo	RESOLUTE WYOMING, INC	891012381A	WYW068134F	490052210100S1	CAMPBELL	Non-Federal	Oil	No	Not Fractured
Buffalo	TRUE OIL LLC	WYW106645X	WYW0313874	490052232200S1	CAMPBELL	BLM	Oil	No	Not Fractured
Buffalo	WINDSOR ENERGY GROUP LLC	8910124120	WYW043749	490052106700S1	CAMPBELL	Non-Federal	Oil	No	Not Fractured
Casper	ANTELOPE RESOURCES INC	WYW03798D	WYW03798D	490250946500S1	NATRONA	Non-Federal	Oil	No	Not Fractured
Casper	ARNELL OIL COMPANY	WYC036770	WYC036770	490252356600S1	NATRONA	BLM	Oil	No	Not Fractured
Casper	FOSSIL ENERGY INC	WYW31808	WYW31808	490252073600S1	NATRONA	Non-Federal	Oil	No	Not Fractured
Casper	FOSSIL ENERGY INC	WYW86091	WYW86091	490250712000S1	NATRONA	Non-Federal	Oil	No	Not Fractured
Casper	HOWELL PETROLEUM CORPORATION	WYW109800A	WYC036905A	490250009800S1	NATRONA	BLM	Oil	No	Not Fractured
Casper	HOWELL PETROLEUM CORPORATION	WYW109800A	WYC036928B	490250912100S2	NATRONA	BLM	Oil	No	Not Fractured
Casper	HOWELL PETROLEUM CORPORATION	WYW109800A	WYC036922	490250908500S1	NATRONA	BLM	Oil	No	Not Fractured
Casper	HOWELL PETROLEUM CORPORATION	WYW109800A	WYC036932B	490250888400S2	NATRONA	BLM	Oil	No	Not Fractured
Casper	HOWELL PETROLEUM CORPORATION	WYW109800A	WYC060520	490250900500S1	NATRONA	BLM	Oil	No	Not Fractured
Casper	HOWELL PETROLEUM CORPORATION	WYW109800A	WYC036747B	490250876100S1	NATRONA	BLM	Oil	No	Not Fractured
Casper	HOWELL PETROLEUM CORPORATION	WYW109800A	WYC037034C	490252129500S1	NATRONA	BLM	Oil	No	Not Fractured
Casper	HOWELL PETROLEUM CORPORATION	WYW109800A	WYC036893B	490252157100S1	NATRONA	BLM	Oil	No	Not Fractured
Casper	HOWELL PETROLEUM CORPORATION	WYW109800A	WYC060526	490252229400S1	NATRONA	BLM	Oil	No	Not Fractured
Casper	HOWELL PETROLEUM CORPORATION	WYW109800A	WYC039320	490252188400S1	NATRONA	BLM	Oil	No	Not Fractured
Casper	HOWELL PETROLEUM CORPORATION	WYW109800A	WYC036894A	490252163900S1	NATRONA	BLM	Oil	No	Not Fractured
Casper	IRON CREEK PROPERTIES, INC	WYC036809	WYC036809	490252336100S1	NATRONA	BLM	Oil	No	Not Fractured
Casper	MATRIX PRODUCTION COMPANY	WYW110831	WYW35690	490092117800S1	CONVERSE	Non-Federal	Oil	No	Not Fractured
Casper	OSBORN HEIRS COMPANY	WYW110477	WYW90961	490092253000D1	CONVERSE	Non-Federal	Oil	No	Not Fractured
Casper	SAMSON RESOURCES COMPANY	WYW129796	WYW87865	490092278900S1	CONVERSE	Non-Federal	Oil	No	Not Fractured
Casper	SUNSHINE VALLEY PETROLEUM CORP	WYW110302	WYW30207	490092198200S1	CONVERSE	USFS	Oil	No	Not Fractured
Kemmerer	CHEVRON U.S.A. INC	WYW109640C	WYW34525	490412101500S1	UINTA	BLM	Oil	No	Not Fractured
Lander	CITATION OIL & GAS CORPORATION	WYC044067	WYC044067	490130528800S1	FREMONT	Non-Federal	Oil	No	Not Fractured
Lander	US ORE CORP	WYC030080A	WYC030080A	490130514700S1	FREMONT	BLM	Oil	No	Not Fractured
Newcastle	FARNSWORTH ENERGY LLC.	WYW21902B	WYW21902B	490452196500S1	WESTON	Non-Federal	Oil	No	Not Fractured
Newcastle	WINTER RIDGE ENERGY LLC	WYW16989	WYW16989	490112251500S1	CROOK	BLM	Oil	No	Not Fractured
Newcastle	WINTER RIDGE ENERGY LLC	WYW16989	WYW16989	490112090400S1	CROOK	BLM	Oil	No	Not Fractured
Worland	MERIT ENERGY COMPANY	WYW138881X	WYC044140	490170571300S1	HOT SPRINGS	BLM	Oil	No	Not Fractured
Roswell	NORDSTRAND ENGINEERING INC.	NMNM046153A	NMNM046153A	300052076000S1	CHAVES	BLM	Oil	No	Not Fractured

Number of Wells Hydraulically Fractured and Relationship to Underground Sources of Drinking Water  
(706 well sample)

Field Office	Operator	Case Number	Lease Number	American Petroleum Institute Number	County	Surface Management Entity	Oil or Gas Well	Hydraulically Fractured?	Relationship to an Underground Source of Drinking Water (USDW)
Roswell	NORDSTRAND ENGINEERING INC.	NMNM18503	NMNM18503	300052090100S1	CHAVES	BLM	Oil	No	Not Fractured
Tulsa	CLARK OPERATING INCORPORATED	OKNM75241X	OKGLO08221	351410091000S1	TILLMAN	Non-Federal	Oil	No	Not Fractured
Tulsa	CLARK OPERATING INCORPORATED	OKNM75241X	OKG014088	351417005900S1	TILLMAN	Non-Federal	Oil	No	Not Fractured
Milwaukee	P & D VALENTINE OIL COMPANY	OHES14356	OHES14356	341676589400S1	WASHINGTON	USFS	Oil	****This info is unavailable.	

\*Coal Bed Natural Gas is produced from coal seams containing Underground Sources for Drinking Water. The seam is dewatered to reduce pressure and release the gas, then water is reinjected to fracture the coal and produce gas.

\*\* "Near an Underground Source of Drinking Water" is defined as within the zone of endangering influence which is a fixed radius around the well of not less than ¼ mile.

\*\*\*Fractured, but not in, below or near an USDW - Means fractured in an area that does not supply a public water system or; in an area that may have sufficient water to supply a public water system but does not currently supply water for human consumption or; does not supply water that is less than 10,000 mg/l total dissolved solids.

\*\*\*\*Drilled under private lease that government subsequently acquired.