Table of Aquifer Exemptions in Region 6

Region	Number	Basic Information										Location, delineation and Depths				Geology and Injectate Characteristics							Exemption Type, Criteria Cited and Approval Dates		
		Name of Owner/Operator	Street Address	City	State	Zip Code	Company	Business Type	Injection Well ID# or Area Permit #	Well Class	Injection Activity	Aquifer Exemption Location (Degrees Latitude or TSR)	Aquifer Exemption Location (Degrees Longitude)	Aquifer Exemption Delineation (areal extent, project boundary)	Aquifer Exemption Delineation (depths)	Well Depths	Injection Zone	Confining Zone	Formation Depth Thickness	Lithology	Water Quality	Injectate Characteristics	Program Revision Type (S or NS)	Regional Approval Date	Criteria Cited
6	1	Uranium Resources Inc. (URI)	12750 Merit Drive, Suite 1010 LB 12	Dallas	TX	75251	Uranium Resources Inc. (URI)	In-situ Uranium Mining	Rosita Mine – Area Permit # is UR02880. Well ID is WDW-250 Permit Status: Active	Class III	Dispose process waste, restoration waste and contaminated rainfall from the in-situ leaching and recovery operations into the Lower Goliad Formation in Duval County, Texas		Longitude 98° 24' 17" West	Area of exemption is approx. 70 acres. The site is located at 11 miles northwest of the City of San Diego off State Highway 44 in Duval County, Texas	Top of zone exempted 140 ft (msl) Bottom of zone exempted 260 ft (msl),	5,450 ft	Injection Zone is approx. 4,400 to 5,500 ft, Thickness = 1000 ft with a net usable sand thickness of 470 ft, a permeability of 250 millidarcies, a porosity of about 30%,	Upper and Lower confining layers are clay and silt zones.	Thickness of exempted zone = 10 to 70 ft	Basal Goliad consist of biomodal sands and gravel conglomerates with poor bed form development and have little sedimentary structure. Middle and Upper Goliad are finer grained sands with better sedimentary structure and bedform development and relict caliche cementatio	1,750-2,000 mg/l TDS	alkaline leaching solution, non-amonia with an oxidant. Injected Fluid Quality = 1,000-5,000 mg/l TDS, pH shall not be less than 5 nor greater than 9.5. Density shall not exceed a specific gravity of 1.05 s.u. measured at 68 degrees.	Non-substantial	State Recommendation (May 12, 1987), Regional Approval (September 10, 1987), State Approval (August 24, 1988). EPA HQ Approval (October 4, 1988)	40 CFR 144.7 (b), 145.32, and 146.04. Justification for Exemption: Aquifer is not a source of DW and will not serve as a source of DW in the future because it is producing or capable to produce minerals
6	2	Mobil Oil Corporation	PO Box 17772	Denver	CO	80217	Cogema Mining Inc.	In-situ Uranium Mining	El Mesquite Mine - Area Permit # is UR02155 UR02153 Four injection wells located in this area: UI-792, UI-942, UI-927, and UI-808. Permit Status: Revoked	Class III	Inject solution from in-situ mining process into the Middle Catahoula Formation in Duval County, Texas	Preferred Option -	-98.717	Lease Area is 2240 acres. Permit Area is 2134.78 acres. The site is located approx 6 miles east of Bruni in Share Nos. 1, 2, 3, 3A, 4, 5, 6, and 8 of the El Mesquite Grant and a part of the Santa Maria de Los Angeles de Abajo Grant in Duval County, Texas	Top of zone exempted 350 ft (msl) Bottom of zone exempted 400 ft (msl),	Well UI-792 (578 ft), Well UI-942 (557 ft), Well UI-927 (587 ft), and Well UI-808 (585 ft)	Middle Catahoula Formation or Soledad Conglomerate	The Middle Catahoula production zone is overlain by the Chusa Tuff which is a thick clay section of the Catahoula Formation and underlies the Faut Tuff which is another effective aquiclude and extensive.	75 to 200 ft	The Middle Catahoula is separated from the Oakville Sandstone by the Upper or Chusa Tuff which is a thick clay section of the Catahoula Formation. Porosity (15-25%). Permeability (200-1000 md). Storage	fresh to moderately saline water	Alkaline solution and Barrea solution from the processing plant where uranium is extracted by ion exchange.	Non-substantial	State Recommendation (March 9, 1984), Regional Approval (March 28, 1984)	40 CFR 144.7 (b), 145.32, and 146.04. Justification for Exemption: Aquifer is not a source of DW and will not serve as a source of DW in the future because it is producing or capable to produce minerals

6	3	Everest Exploration, Inc.	PO Box 1339	Corpus Christi	TX	78403	Everest Exploration, Inc.	In-situ Uranium Mining	Mt. Lucas West Mine - Area Permit # is UR02381. Permit Status: Revoked	Class III	Inject solution from in-situ mining process into the Lagarto Formation of Mt. Lucas West site, Live Oak County, Texas	28.18362	-97.93364	Lease area is 4360 acres. Permit Area is 6023 acres. The site is located in south central Texas in Live Oak County, approx. 3 miles south of Dinero, Texas along and northeast of State Highway 534, bounded on the east by the Nueces River and Lake Corpus Christi.	Goliad Formation: Top of zone exempted 200 ft (msl) Bottom of zone exempted 575 ft (msl) Lagarto Formation: 225 ft below mean sea level to 625 ft below mean sea level		Production Zone for Mt. Lucas is located within the Goliad Formation. Production Zone for Mt. Lucas West is located within the Lagarto Formation.	The Lagarto Formation overlies the Oakville sandstone and is overlain by the Goliad sand.	Goliad Formation: 375 ft thick Lagarto Formation: 400 ft thick	The Goliad consists of clay, siltsone, and sandstone. The Lagarto consists primarily of clay, sandy and silty clay, and calcareous clay interbedded with somewhat thinner zones of sand. Porosity (20-25%), Permeability (2000 md), Storage	Water from the Lagarto has a higher chloride content. In some areas, the water quality of the mine zone aquifers has a higher Radium-226 level than is allowable by TX Dept. of Health standards for release to unrestricted areas.		Non-substantial	State Recommendation (February 15, 1984), Regional Approval (December 17, 1984)	40 CFR 144.7 (b), 145.32, and 146.04. Justification for Exemption: Aquifer is not a source of DW and will not serve as a source of DW in the future because it is producing or capable to produce minerals
6	4	TOTAL Minerals Corporation/ Malapai Resources Company	333 Clay Street - Suite 4800	Houston	TX	77002	Cogema Mining Inc.	In-situ Uranium Mining	Holiday Mine - Area Permit # is UR02156. Injection wells located in this area are WDW-150, WDW-151, WDW-197, WDW-198, WDW-199, and WDW-200. Permit Status: Revoked	Class III	Inject alkaline leaching solution along with an oxidant into the Soledad Member of the Catahoula Formation in Duval County, Texas.	27.40864	-98.742	Exempted Area is over 2033.5 acres of the Soledad member of the Catahoula Formation (Requested and extension of over 600 acres in the northwest corner of permit area.) The site is located 4.5 miles east of Bruni, TX, Section Nos. 13, 15, 20, 22, 23, 24, and 25 of the Cole Petroleum Company Subdivision of the Santa Maria de Los Angeles Grant in Duval County, Texas.	Top of zone exempted 600 ft (msl) Bottom of zone exempted 440 ft (msl)		Injection is limited to the Soledad Member of the Catahoula Formation.	The Chusa Tuff, 175 ft to 200 ft thick, (the upper member of the Catahoula Formation) serves as the upper aquiclude. The Fant Tuff, 500 ft thick, (the lower member of the Catahoula Formation) serves as the lower	Approx. 100 ft	The Soledad Member consists of four sand units. Other data of Catahoula sands: porosity (15-25%), permeability (200-1000 md), storage (1.0E-4)	1,170-1,860 mg/l TDS.	1,270-2,060 mg/l TDS. Lixiviant is an oxygen rich, Sodium-bicarbonate anion solution.	Non-substantial	State Recommendation (January 23, 1990), Regional Approval (February 7, 1992)	40 CFR 144.7 (b), 145.32, and 146.04. Justification for Exemption: Aquifer is not a source of DW and will not serve as a source of DW in the future because it is producing or capable to produce minerals
6	5	Uranium Resources Inc. (URI)	12377 Merit Drive, Suite 750, LB 14	Dallas	TX	75251	Uranium Resources Inc. (URI)	In-situ Uranium Mining	Benavides Mine - Area Permit # is UR02312. Permit Status: Production Never Initiated	Class III	Inject alkaline leaching solution along with an oxidant into the Middle Catahoula Formation in Duval County, Texas.	27.42531	-98.78366	Lease area is 337 acres. Permit Area is 223.86 acres. This site is located 3.5 miles east of Bruni, TX along the arroyo de Los Angeles in Sections 21 and 22 of the Santa Maria de Los Angeles de Arriba, Mariano Arispe Grant in Duval County, Texas.	Top of zone exempted 550 ft (msl) Bottom of zone exempted 220 ft (msl)		Injection is limited to the Middle Catahoula Formation.	The Chusa Tuff, 175 ft to 200 ft thick, (the upper member of the Catahoula Formation) serves as the upper aquiclude. The Fant Tuff, 500 ft thick, (the lower member of the Catahoula Formation) serves as the lower		Catahoula sands: porosity (15-25%), permeability (200-1000 md), storage (2.5E-4 to 10.3E-2)	fresh to moderately saline water	Alakaline, non-amonia leaching solution	Non-substantial		40 CFR 144.7 (b), 145.32, and 146.04. Justification for Exemption: Aquifer is not a source of DW and will not serve as a source of DW in the future because it is producing or capable to produce minerals

6	6	TOTAL Minerals Corporation/ Malapai Resources Company	333 Clay Street - Suite 4800	Houston	TX	77002	Cogema Mining Inc.	In-situ Uranium Mining	O'Hern Mine - Area Permit # is UR01941. Injection wells located in this area are: 75-UI-944, 75-UI-704, 75-UI-688, 75-UI-777, and 75-UI-8. Permit Status: Production Never Initiated	Class III	Inject a mildly alkaline leaching solution along with an oxidant into the Soledad Member of the Catahoula Formation in Webb and Duval Counties, Texas.	27.3967	-98.80866	Expand exemption formation from 290 ft above msl to 650 ft above msl over a 570 acres area within the original 2690 acres exemption area: 2050 acres in the Myrtle E. Hale Subdivision in Duval and Webb Counties and 640 acres in the O'Hern-Seacord Subdivision of the Porfirio Garza Survey No. 174, A-1250 in Duval County, Texas. This site is located 2.8 miles southeast of Bruni on State Highway 359, in Webb and Duval Counties, Texas.	Top of zone exempted 290 ft (msl) Bottom of zone exempted 60 ft (msl)	Well 75-UI-944 (456 ft), Well 75-UI-704 (317 ft), Well 75-UI-688 (298 ft), Well 75-UI-777 (280 ft), and Well 75-UI-8 (270 ft)	Injection is limited to the Soledad Member of the Catahoula Formation.	The Chusa Tuff, 175 ft to 200 ft thick, (the upper member of the Catahoula Formation) serves as the upper aquiclude. The Fant Tuff, 500 ft thick, (the lower member of the Catahoula Formation) serves as the lower	710 ft	Catahoula Sands: porosity (15-25%), permeability (200-1000 md), storage (3.0E-4)	2,010 mg/l to 3,220 mg/l TDS	Alakaline, non-amonia leaching solution	Non-substantial	State Recommendation (February 21, 1991), Regional Approval (June 3, 1992)	40 CFR 144.7 (b), 145.32, and 146.04. Justification for Exemption: Aquifer is not a source of DW and will not serve as a source of DW in the future because it is producing or capable to produce minerals
6	7	Uranium Resources Inc. (URI)	12750 Merit Drive, Suite 1010 LB 12	Dallas	TX	75251	Uranium Resources Inc. (URI)	In-situ Uranium Mining	Vasquez Mine - Area Permit # is UR03050. Injection wells located in this area: A-31, A-44, B-52, C-58, C-64, D-3, D-9A, and D-32B. Permit Status: Active	Class III	Dispose process waste, restoration waste and contaminated rainfall from the in-situ leaching and recovery operations into the Oakville Sandstone Formation, Duval County,			Permitted area is portion of the Oakville Sandstone Formation, underlying approx. 842 acres. The site is located on the north side of Highway 359, 10 miles south-southeast of the City of Bruni in Duval County and 50 miles east of Laredo, Texas.	Top of zone exempted 150 ft (msl) Bottom of zone exempted 210 ft (msl)	ELD depth to top of formation: Well A-31 (3,860 ft), Well A-44 (3,480 ft), Well B-52 (3,716 ft), Well C-58 (3,784 ft), Well C-64 (4,017 ft), Well D-3 (3,427 ft), Well D-9A (3,418 ft), and Well D-32B (3,357	Inject into the Oakville Sandstone Formation.	The Oakville unconformably overlies the Catahoula Tuff (200 ft of clay) and is conformably overlain by the Fleming Formation (80-100 ft of clay).	Thickness of the exempted zone is approx. 45 to 75 ft.	The Oakville consists of silts, sands and chert pebble conglomerates with interbedded clay lenses. The clay lenses divide the Oakville into four sand units. Each unit contains a roll front.	1,000 - 1,500 mg/l TDS	alkaline leaching solution, non-amonia with an oxidant.	Non-substantial	State Recommendation (September 17, 1997), Regional Approval (July 17, 1998)	40 CFR 144.7 (b), 145.32, and 146.04. Justification for Exemption: Aquifer is not a source of DW and will not serve as a source of DW in the future because it is producing or capable to produce minerals
6	8	Caithness Mining Corp.	P.O. Box 818	Hebbronville	TX	78361	Caithness Mining Corp.	In-situ Uranium Mining	Silver Lake Mine - Area Permit # is UR02559. Four injection wells located in the exempted zone: MWG-10, MWG-7, G-17, and ST-14. Permit Status: Production Never Initiated		Injection for in-situ uranium mining only into the Lower Oakville Aquifer in Jim Hogg County, Texas.	27.33364	-98.63365	The exempted area is about 2,000 acres and located approx. 1.5 miles north of Hebbronville, Jim Hogg County, Texas. The areal extent of the exemption concides with the Lomex Corporation's Gruy lease and the northern half, west of Highway 359 of the Lomex Southwest Texas Corporation lease.	The elevation, with respect to mean sea level, of the top of the exempted aquifer ranges from +310 ft on the west to about +60 ft on the east. The elevation of the base of the exempted aquifer ranges from about +260 ft on the west to about +35 ft on the east (subsurface depth 330-560 ft).	363 ft (well MWG-10), 418 ft (well MWG-7), 418 ft (well G-17), 510 ft (well ST-14)	Injection is limited to the Lower Oakville Formation in Jim Hogg County, Texas.	The Lower Oakville Formation is underlain by the Catahoula (Chusa Tuff) and separated from drinking water sources by 80-100 ft of	45 to 75 ft	The Lower Oakville Formation is a sandstone aquifer	802 - 1,170 mg/l TDS		Non-substantial	State Recommendation (December 7, 1982), Regional Approval Date (June 3, 1983)	40 CFR 144.7 (b), 145.32, and 146.04. Justification for Exemption: Aquifer is not a source of DW and will not serve as a source of DW in the future because it is producing or capable to produce minerals
6	9	Everest Exploration, Inc.	PO Box 1339	Corpus Christi	TX	78403	Everest Exploration, Inc.	In-situ Uranium Mining	Las Palmas Mine - Area Permit # is UR02441. Four injection wells located in the permitted area: RM-4, RM-3, 140-33, and RM-9. Permit Status: Production Never Initiated	Class III	Injection for in-situ uranium mining only into the Lower Oakville Aquifer in Duval and Jim Hogg Counties, Texas.	27.37531	-98.62532	Lease area is 3100 acres. Total area exempted is 3500 acres. This site is located approximately 5 miles northeast of Hebbronville in southwestern Duval County and northwestern Jim Hogg County, Texas.	The elevation of the top of the Lower Oakville ranges from 225 ft above mean sea level to 100 ft below msl. The base of the aquifer ranges from 80 ft above msl to 200 ft below msl.	490 ft (well RM-4), 570 ft (well RM-3), 640 ft (well 140-33), and 715 ft (well RM-9)	The injection zone is in the sands of the Lower Oakville Formation.	The Lower Oakville Formation is separated from drinking water sources by 80-100 ft of clay of the Chusa Tuff. The production zone is confined by overlying and underlying	85 ft	The Lower Oakville Formation is a sandstone aquifer with porosity (20-25%), permeability (940 md), storage (1.3E-4)	1,140 - 1,230 mg/l TDS	Alkaline leaching solution with an oxidant.	Non-substantial	State Recommendation (January 6, 1982), Regional Approval Date (June 3, 1983)	40 CFR 144.7 (b), 145.32, and 146.04. Justification for Exemption: Aquifer is not a source of DW and will not serve as a source of DW in the future because it is producing or capable to produce minerals
6	10	Caithness Mining Corp.	P.O. Box 818	Hebbronville	TX	78361	Caithness Mining Corp.	In-situ Uranium Mining	McBryde Mine - Area Permit # is UR02420 Permit Status: Production Never Initiated		Injection for in-situ uranium mining only into the Lower Oakville Formation	31.49731	-99.35776	This site is located in Duval County, Texas. Lease area (401.25 acres). Permit area (401.25 acres)	Top of zone exempted 315 ft (msl) Bottom of zone exempted 80 ft (msl)					porosity (20-25%), permeability (940 md), storage (1.3E-4)	fresh to slightly saline water			

6	11	Conoco, Inc.	10 Desta Drive - Suite 100W	Midland	TX	79705	Conoco, Inc.	Oil and Gas Company	Trevino Mine - Area Permit # is UR02407 Permit Status: Production Never Initiated		Injection for in-situ uranium mining only into the Oakville Formation	31.49731	-99.35776	This site is located in Duval County, Texas. Lease area (5750.69 acres). Permit area (742.7 acres)	Top of zone exempted 400 ft (msl) Bottom of zone exempted 125 ft (msl)					porosity (20-25%), permeability (940 md), storage (1.3E-4)	fresh to slightly saline water				
6	12	Everest Exploration, Inc.	PO Box 1339	Corpus Christi	TX	78403	Everest Exploration, Inc.	In-situ Uranium Mining	Holson Mine - Area Permit # is UR02208 Permit Status: Revoked		Injection for in-situ uranium mining only into the Jackson Group of Whitsett Formation with Tordilla Sandstone	28.94526	-97.98811	This site is located in Karnes County, Texas. Lease area (182 acres). Permit area (182 acres)	Top of zone exempted 200 ft (msl) Bottom of zone exempted 175 ft (msl)					porosity (20-25%), permeability (200-1000 md), storage (4.0E-5)	fresh to moderately saline water				
6	13	Intercontinental Energy Corporation	Route 1, Box 650	Three Rivers	TX	78071	Intercontinental Energy Corporation	In-situ Uranium Mining	Pawnee Mine - Area Permit # is UR02050 Permit Status: Revoked		Injection for in-situ uranium mining only into the Oakville Formation in Bee County, Texas	28.65999	-97.969200	This site is located approx. 2.4 miles east of Pawnee and 0.25 mile north of CR 798 in Bee County, Texas. Lease area (325 acres). Permit area (110 acres)	Top of zone exempted 290 ft (msl) Bottom of zone exempted 10 ft (msl)	approx. 4,000 ft		Mineralized sands (probably uraninite) directly overlie the massive impermeable clays of the Catahoula formation, and are overlain by clays of the Oakville and Fleming formations.		Hydrologically, the mineralized horizon can be characterized as a moderately to well sorted, loosely consolidated sandstone or arkosic sandstone with porosity (20-25%), permeability (2000-19000 md), storage (2.0E-4)	fresh to moderately saline water				
6	14	Intercontinental Energy Corporation	Route 1, Box 650	Three Rivers	TX	78071	Intercontinental Energy Corporation	In-situ Uranium Mining	Zamzow Mine - Area Permit # is UR02108 Permit Status: Revoked		Injection for in-situ uranium mining only into the Oakville Formation	28.45718	-98.09141	This site is located on FM 1358 approx. 1 mile south of Ray Point in Karnes County, Texas. Lease area (316 acres). Permit area (316 acres)	Top of zone exempted 210 ft (msl) Bottom of zone exempted 150 ft (msl)										
6	15	Newfuels (Mobil Oil Corporation)	P.O. Box 5444	Denver	CO	80217	Mobil Oil Corporation	Oil and Gas Company	Piedre Lumbre 202 Mine - Area Permit # is UR02147 Permit Status: Revoked		Injection for in-situ uranium mining only into theCatahoula Soledad Member	27.95279	-98.66703	This site is located approx. 8 miles north of Freer in Brooks County, Texas. Lease area (156 acres). Permit area (156 acres)	Top of zone exempted 325 ft (msl) Bottom of zone exempted 35 ft (msl)					porosity (15-25%), permeability (200-1000 md), storage (1.0E-4)	fresh to moderately saline water				
6	16	Newfuels (Mobil Oil Corporation)	P.O. Box 5444	Denver	CO	80217	Mobil Oil Corporation	Oil and Gas Company	Brelum 199 Mine - Area Permit # is UR02148 Permit Status: Revoked		Injection for in-situ uranium mining only into the Catahoula Soledad Member	27.95279	-98.66703	This site is located approx. 9 miles north of Freer and 1 mile west of Hwy 16 in Brooks County, Texas. Lease area (165 acres). Permit area (165 acres)	Top of zone exempted 165 ft (msl) Bottom of zone exempted 170 ft (msl)					porosity (15-25%), permeability (200-1000 md), storage (1.0E-4)	fresh to moderately saline water				
6	17	Newfuels (Mobil Oil Corporation)	P.O. Box 5444	Denver	CO	80217	Mobil Oil Corporation	Oil and Gas Company	Piedre Lumbre 200-201 Mine - Area Permit # is UR02149 Permit Status: Revoked		Injection for in-situ uranium mining only into the Catahoula Soledad Member	27.95279	-98.66703	This site is located approx. 8 miles north of Freer in Brooks County, Texas. Lease area (192.7 acres). Permit area (192.7 acres)	Top of zone exempted 345 ft (msl) Bottom of zone exempted 55 ft (msl)					porosity (15-25%), permeability (200-1000 md), storage (1.0E-4)	fresh to moderately saline water				
6	18	Newfuels (Mobil Oil Corporation)	P.O. Box 5444	Denver	CO	80217	Mobil Oil Corporation	Oil and Gas Company	Piedre Lumbre 201-205 Mine - Area Permit # is UR02152 Permit Status: Revoked		Injection for in-situ uranium mining only into the Catahoula Soledad Member	27.95279	-98.66703	This site is located in Duval County, Texas. Lease area (94 acres). Permit area (94 acres)	Top of zone exempted 370 ft (msl) Bottom of zone exempted 85 ft (msl)					porosity (15-25%), permeability (200-1000 md), storage (1.0E-4)	fresh to moderately saline water				

6	19	Newfuels (Mobil Oil Corporation)	P.O. Box 5444	Denver	CO	80217	Mobil Oil Corporation	Oil and Gas Company	Brelum 106-200 Mine - Area Permit # is UR02151 Permit Status: Revoked		Injection for in-situ uranium mining only into the Catahoula Soledad Member	27.95279	-98.66703	This site is located in Duval County, Texas. Lease area (447 acres). Permit area (447 acres)	Top of zone exempted 265 ft (msl) Bottom of zone exempted 35 ft (msl)					porosity (15-25%), permeability (200-1000 md), storage (1.0E-4)	fresh to moderately saline water				
6	20	Newfuels (Mobil Oil Corporation)	P.O. Box 5444	Denver	CO	80217	Mobil Oil Corporation	Oil and Gas Company	Nell Mine - Area Permit # is UR02202 Permit Status: Revoked		Injection for in-situ uranium mining only into the Catahoula Soledad Member	28.66697	-98.06281	This site is located in Bee and Live Oak Counties, Texas. Lease area (1230.31 acres). Permit area (1230.31 acres)	Top of zone exempted 340 ft (msl) Bottom of zone exempted 235 ft (msl)					porosity (15-25%), permeability (200-1000 md), storage (1.0E-4)	slightly to very saline water				
6	21	Chevron Corporation	P.O. Box 528	Benavides	TX	78341	Chevron Corporation	Oil and Gas Company	Palangana Mine - Area Permit # is UR02051 Permit Status: Revoked		Injection for in-situ uranium mining only into the Goliad	27.68363	-98.37532	It is located approx. 5.4 miles north of Benavides in Duval County, Texas. Permit area (161.7 acres)	Top of zone exempted 365 ft (msl) Bottom of zone exempted 220 ft (msl)	Approx. 5,700 ft	Inject into the Goliad Formation in Duval County, Texas	The Pliocene Goliad Formation, host for the Palangana and other uranium deposits, unconformably overlies the Fleming Formation and is composed of three units: a basal fine to coarse-grained to conglomeratic cross-bedded unit with calcareous clay; a middle member of calcareous clay; and an upper unit of sandstone and	Approx. 380 ft	The Goliad formation at Palangana is composed of fine- to medium-grained, often silty, channel sands interbedded with lenses of mudstone and siltstone. For the most part, the sand is very sparsely cemented although it varies from friable to indurate, porosity (20-25%), permeabilit	fresh to slightly saline water				
6	22	South Texas Mining Venture, LLP (STMV)	500 N. Shoreline Blvd. #800N	Corpus Christi	TX	78471	South Texas Mining Venture, LLP (STMV)	In-situ Uranium Mining	Palangana Mine - Area Permit # is UR03070 Permit Status: Active		Injection for in-situ uranium mining only into the Goliad Formation in Duval County, Texas.	27.68363	-98.37532	It is located approximately 25 miles west of the town of Alice in Duval County, Texas. Permit area (6157.4 acres)	Top of zone exempted 365 ft (msl) Bottom of zone exempted 220 ft (msl)		Inject into the Goliad Formation in Duval County, Texas	The Pliocene Goliad Formation, host for the Palangana and other uranium deposits, unconformably overlies the Fleming Formation and is composed of three units: a basal fine to coarse-grained to conglomeratic cross-bedded unit with calcareous clay; a middle member of calcareous clay; and an upper unit of sandstone and	Approx. 380 ft	The Goliad formation at Palangana is composed of fine- to medium-grained, often silty, channel sands interbedded with lenses of mudstone and siltstone. For the most part, the sand is very sparsely cemented although it varies from friable to indurate, porosity (20-25%), permeabilit	fresh to slightly saline water				

6	23	USX Corp. - Texas Uranium Operations	Drawer V	George West	TX	78022	USX Corp.	Uranium Mining	Moser Mine - Area Permit # is UR01890 Permit Status: Revoked		Injection for in-situ uranium mining only into the Oakville Formation in Live Oak County, Texas	28.25608	-98.21091	This site is located approximately 8 miles southwest of George West on FM 889 in Live Oak County, Texas. Lease area (1249 acres). Permit area (1249 acres)	Top of zone exempted 280 ft (msl) Bottom of zone exempted 260 ft (msl)					porosity (20-25%), permeability (2000-19000 md), storage (2.0E-4)	fresh to slightly saline water				
6	24	USX Corp. - Texas Uranium Operations	Drawer V	George West	TX	78022	USX Corp.	Uranium Mining	Burns Moser Mine - Area Permits # are UR02140 UR02025 UR01890 Permits Status: Revoked		Injection for in-situ uranium mining only into the Oakville Formation in Live Oak County, Texas	28.24195	-98.19198	This site is located approximately ten miles southwest of George West, west of U.S. Highway 59 in Live Oak County, Texas. Lease area (1012.7 acres). Permit area (1012.7 acres)	Top of zone exempted 375 ft (msl) Bottom of zone exempted 25 ft (msl)					porosity (20-25%), permeability (2000-19000 md), storage (2.0E-4)	fresh to slightly saline water				
6	25	USX Corp. - Texas Uranium Operations	Drawer V	George West	TX	78022	USX Corp.	Uranium Mining	Clay West Mine - Area Permit # is UR02130 Permit Status: Revoked		Injection for in-situ uranium mining only into the Oakville Formation in Live Oak County, Texas	28.24639	-98.21253	This site is located in Live Oak County, Texas. Lease area (884 acres). Permit area (884 acres)	Top of zone exempted 300 ft (msl) Bottom of zone exempted 225 ft (msl)	Approx. 4,500 ft				porosity (20-25%), permeability (2000-19000 md), storage (2.0E-4)	fresh to slightly saline water				
6	26	USX Corp. - Texas Uranium Operations	Drawer V	George West	TX	78022	USX Corp.	Uranium Mining	Boots-Brown Mine - Area Permit # is UR02154 Permit Status: Revoked		Injection for in-situ uranium mining only into the Oakville Formation in Live Oak County, Texas	28.28558	-98.21561	This site is located in Live Oak County, Texas. Lease area (1025.3 acres). Permit area (1025.3 acres)	Top of zone exempted 100 ft (msl) Bottom of zone exempted 300 ft (msl)					porosity (20-25%), permeability (2000-19000 md), storage (2.0E-4)	fresh to slightly saline water				
6	27	USX Corp. - Texas Uranium Operations	Drawer V	George West	TX	78022	USX Corp.	Uranium Mining	Pawlik Mine - Area Permit # is UR02368 Permit Status: Revoked		Injection for in-situ uranium mining only into the Oakville Formation in Live Oak County, Texas			This site is located in Live Oak County, Texas. Lease area (1698 acres). Permit area (1671 acres)	Top of zone exempted 45 ft (msl) Bottom of zone exempted 430 ft (msl)					porosity (20-25%), permeability (2000-19000 md), storage (2.0E-4)	fresh to slightly saline water				
6	28	Uranium Resources Inc. (URI)	12750 Merit Drive, Suite 1210 LB 12	Dallas	TX	75251	Uranium Resources Inc. (URI)	In-situ Uranium Mining	West Cole Mine - Area Permit # is UR02463 Permit Status: Revoked		Injection for in-situ uranium mining only into the Catahoula Soledad Member	27.50948	-98.85422	This site is located in Webb County, Texas. Lease area (680 acres). Permit area (620.31 acres)	Top of zone exempted 610 ft (msl) Bottom of zone exempted 335 ft (msl)					porosity (15-25%), permeability (200-1000 md), storage (2.5E-4 to 10.3E-2)	fresh to very saline water				
6	29	Uranium Resources Inc. (URI)	12750 Merit Drive, Suite 1210 LB 12	Dallas	TX	75251	Uranium Resources Inc. (URI)	In-situ Uranium Mining	Longoria Mine - Area Permit # is UR02222 Permit Status: Production Never Initiated		Injection for in-situ uranium mining only into the Catahoula Soledad Member	27.37753	-98.78811	This site is located in Duval County, Texas. Lease area (2312.5 acres). Permit area (722 acres)	Top of zone exempted 192 ft (msl) Bottom of zone exempted 175 ft (msl)					porosity (15-25%), permeability (200-1000 md), storage (2.5E-4 to 10.3E-2)	fresh to moderately saline water				
6	30	Wyoming Minerals Corporation / Westinghouse (parent company)	P.O. Box 3912	Pittsburgh	PA	15230	Wyoming Minerals Corporation / Westinghouse (parent company)	In-situ Uranium Mining	Bruni Mine - Area Permit # is UR01942 Permit Status: Revoked	Over 1,720 injection/production wells exist at the site	Injection ammonium carbonate/bicarbonate lixiviant from in-situ uranium mining into the Catahoula Formation in Webb County, Texas	27.50951	-98.85423	This site is located approx. 7 miles north of Bruni and immediate west of Highway 2050 in Webb County, Texas. Lease area (1480 acres). Permit area (1480 acres)	Top of zone exempted 720 ft (msl) Bottom of zone exempted 450 ft (msl)		Inject into the Catahoula Formation	The Ogligocene Frio Clay underlies the Catahoula Formation.	Approx. 800 ft	Catahoula Formation is composed mainly of clay with relatively discontinuous clayey sand lenses. porosity (15-25%), permeability (200-1000 md), storage (2.5E-4 to 10.3E-2)	slightly to very saline water	Ammonium carbonate/bicarbonate lixiviant			

6	31	Wyoming Minerals Corporation / Westinghouse (parent company)	Route 1, Box 650	Three Rivers	TX	78071	Wyoming Minerals Corporation / Westinghouse (parent company)	In-situ Uranium Mining	Lamprecht Mine - Area Permit # is UR01949 Permit Status: Revoked		Injection for in-situ uranium mining only into the Oakville Formation in Live Oak County, Texas	28.50111	-98.0567	This site is located on FM 1358, approx. 1 mile of Ray Point in Karnes County, Texas. Lease area (957 acres). Permit area (619.14 acres)	Top of zone exempted 120 ft (msl) Bottom of zone exempted 230 ft (msl)	Approx. 6,000 ft		The basal sandstone of the Oakville Formation is immediately overlying the Catahoula Formation claystone.	Approx. 75.5 ft	The Oakville Sandstone is a uniform textured, medium grained, well sorted sand composed of detrital quartz, feldspar and rock fragments (dominantly silicic volcanics) with porosity (20-25%), permeability (2000-19000 md), and storage (2.0E-4)	fresh to slightly saline water				
6	32	Wyoming Minerals Corporation / Westinghouse (parent company)	3900 Wadsworth Blvd	Lakewood	CO	80235	Wyoming Minerals Corporation / Westinghouse (parent company)	In-situ Uranium Mining	Benham Mine - Area Permit # is UR02307 Permit Status: Revoked		Injection for in-situ uranium mining only into the Oakville Formation			This site is located in Bee and Live Oak Counties, Texas. Lease area (1240 acres). Permit area (1240 acres)	Top of zone exempted 190 ft (msl) Bottom of zone exempted 15 ft (msl)					porosity (20-25%), permeability (1000-20000 md), storage (1.2E-3)	fresh to slightly saline water				
6	33	Shell Offshore Inc. - Offshore West Division / Nexen Petroleum U.S.A. Inc.	5601 Granite Parkway - Suite 140	Plano	TX	75251	Shell Offshore Inc.	Oil and Gas Company	Well ID # are: 74659, 120263, 125146	Class II	inject salt water into the geographic limits of the Eugene Island Block 18 Field, St. Mary Parish, Louisiana	An offshore Gulf of Mexico field on the St. Mary Parish, Louisiana. Being in the Gulf of Mexico, there is no section-township-range		The Eugene Island Block 18 Field is remotely located in the Gulf of Mexico, outside of Atchafalaya Bay with the nearest land being Point au Fer Island approx 9 miles east-southeast. The coastline area surrounding the field consists of marsh and wooded marsh. The nearest inhabited area is Patterson, approx. 15 miles north of the field.	0 to 1000 ft below the seafloor within the Eugene Island Block 18 Field	Well #74659 (10,400 ft), Well #120263 (10,510 ft), Well #125146 (10,530 ft)	inject salt water into the geographic limits of the Eugene Island Block 18 Field, St. Mary Parish, Louisiana	Beds of clay of the Vicksburg-Jackson groups act as a barrier to the downward movement of water from the Miocene deposits.		Beds of clay of the Vicksburg-Jackson groups act as a barrier to the downward movement of water from the Miocene deposits.	not fewer than 10,000 mg/l TDS except for the interval between 0 to 1,000 ft below the seafloor	salt water	Non-substantial	Regional Approval (November 1, 1988)	40 CFR 146.04. Justification for Exemption: Aquifer does not currently serve as a source of drinking water and the total dissolved solids content of the groundwater is more than 3,000 and less than 10,000 mg/lit and it is not reasonably expected to suppy a public water system.
6	34	Freeport Sulphur Company	1615 Poydras Street	New Orleans	LA	70112	Freeport Sulphur Company	Sulphur Mining Company	Freeport Sulphur Company has 83 Class III wells in the area; however, all are plugged and abandoned.	Class III	This is a former sulphur mining operation that used Class III solution mining injection wells to mine the sulphur caprock of a salt dome. Inject into the Grand Isle Block 18 Sulphur Mine, Jefferson Parish.	An offshore Gulf of Mexico field on the Jefferson Parish-Plaquemines Parish border, Louisiana. Being in the Gulf of Mexico, there is no section-township-range		The exempted aquifer is known as State Lease 797 and located in Block 9, Offshore Grand Isle Area in Jefferson Parish, Louisiana			Inject into the Grand Isle Block 18 Sulphur Mine, Jefferson Parish, Louisiana.				less than 10,000 mg/lit but greater than 3,000 mg/l TDS	sulphur mining solution	Non-substantial	Regional Approval (February 4, 1985)	40 CFR 146.04. Justification for Exemption: Aquifer does not currently serve as a source of drinking water and the total dissolved solids content of the groundwater is more than 3,000 and less than 10,000 mg/lit and it is not reasonably expected to suppy a public water system.

6	35	Freeport Sulphur Company	1615 Poydras Street	New Orleans	LA	70112	Freeport Sulphur Company	Sulphur Mining Company	There are approximately 400 Class III wells belong to Freeport Sulphur Company in the area; however, all are either dry & plugged or plugged & abandoned.	Class III	This is a former sulphur mining operation that used Class III solution mining injection wells to mine the sulphur caprock of a salt dome. Inject into the Garden Island Bay Field, Plaquemine Parish,	Sections 100, 106, 107, 108, and 49 of Township 23 S, Range 32 E	Located at the mouth of the Mississippi River.	The exempted aquifer is known as State Lease 214 and located in Plaquemine Parish, Louisiana							less than 10,000 mg/l but greater than 3,000 mg/l TDS	sulphur mining solution	Non-substantial	Regional Approval (February 4, 1985)	40 CFR 146.04. Justification for Exemption: Aquifer does not currently serve as a source of drinking water and the total dissolved solids content of the groundwater is more than 3,000 and less than 10,000 mg/lit and it is not reasonably expected to suppy a public water system.
6	36	There are many owners/operators operating wells in this field. Major owners/operators are Four Star Development Corp., S.H. Loe Oil Corp., Shoreline GP - LLC., Page Development - LLC.,	Four Star Development Corp. (114 30TH Avenue South), S.H. Loe Oil Corp. (PO Box 248), Shoreline GP - LLC. (3861 Ambassador Caffery Parkway), Page Development - LLC. (PO Box 142)	Four Star Development Corp. (Nashville), S.H. Loe Oil Corp. (Tullos), Shoreline GP - LLC. (Lafayette), Page Development - LLC. (Calvin)	Four Star Development Corp. (TN), S.H. Loe Oil Corp. (LA), Shoreline GP - LLC. (LA), Page Development - LLC. (LA)	Four Star Development Corp. (37212), S.H. Loe Oil Corp. (71479), Shoreline GP - LLC. (70503), Page Development - LLC.(71410)	Four Star Development Corp., S.H. Loe Oil Corp., Shoreline GP - LLC., Page Development - LLC.,	Oil and Gas Company	There are 98 active wells currently injecting into the Tullos-Urania field in Grant, LaSalle, and Winn Parishes, Louisiana.	Class II	Only produced fluids from the Sparta and Wilcox formations related to oil and gas production can be injected in the exempted aquifer of the Tullos-Urania field, Grant, La Salle, Winn Parishes, Louisiana.	Well locations in Grant Parish: Sections 09, 10, 14, 17, and 18, Township 09 N, Range 1 E LaSalle Parish: Section 02, Township 09 N, Range 1 E; Sections 13, 23, 24, 25, 26, 35, and 36, Township 10 N, Range 1 E; Sections 07, 08, 17, 18, 19, 20, and 30, Township 10 N, Range 2 E Winn Parish: Sections 23 and 26, Township 10 N, Range 1 E		This area is located in Grant, LaSalle, and Winn Parishes, Louisiana.	732 ft to 1338 ft	There are 98 active injection wells, majority with a depth of approx. 1,600 ft. Only two or more have a depth of 4,000 ft.	Inject into the exempted aquifer of the Tullos-Urania field, Grant, La Salle, Winn Parishes, Louisiana.			The Sparta is a sandstone formation.	less than 10,000 mg/l but greater than 3,000 mg/l TDS	salt water	Substantial	State Recommendation (November 24, 1987), EPA Approval (September 20, 1988)	40 CFR 146.04. Justification for Exemption: Aquifer does not currently serve as a source of drinking water and the total dissolved solids content of the groundwater is more than 3,000 and less than 10,000 mg/lit and it is not reasonably expected to suppy a public water system.
6	37	Meridian Oil Inc.	PO Box 4289	Farmington	NM	87499	Meridian Oil Inc.	Oil and Gas Company	Jillson Well No. 1 API Well No. is 30-039-25465	Class II	disposing produced salt water into the Entrada Formation through perforations from approx. 8,441 ft to 8,683 ft.	The exemption is specific to this portion of the Entrada Formation that underlies the SW/4 of the SW/4 of Section 4, the S/2 of Section 5, the SE/4 of the SW/4 of Section 6, all of Sections 7 and 8, the W/2 of the W/2 of Section 9, the N/2 of the N/2 of Section 17 and the NE/4 of Section 18 of Township 24 N, Range 3 W in the Rio Arriba County, New Mexico.		The exempted area is approx. 1440 acres. This well is located approx. 6 miles west-northwest of Lindrith, Rio Arriba County, New Mexico.	Subsurface depth interval of zone: 8404 ft to 8672 ft	TD @ 8800 ft	Entrada Formation	The Upper Triassic Chinle Formation unconformably underlies the Entrada Formation throughout the San Juan Basin. The Chinle is approx. 768 ft thick and consists of primarily shales with minor interbeds of sandstone and siltstone. The Entrada also is overlain by 14 ft of Todilto sealing limestone, anhydrite,	Thickness of the exempted zone is approx. 268 ft.	The Entrada consists of three members: a lower sandstone member (the Iyanbito), a middle siltstone member, and an upper sandstone member.	less than 10,000 mg/l TDS, approx. 7,730 mg/l TDS. Elevated groundwater salinities in the Entrada Sandstone are attributable to solution of gypsum from the overlying Todilto Limestone.	Produced salt water	Non-substantial	Regional Approval (March 15, 1995)	40 CFR 146.04. Justification for Exemption: Aquifer does not currently serve as a source of drinking water and the total dissolved solids content of the groundwater is more than 3,000 and less than 10,000 mg/lit and it is not reasonably expected to suppy a public water system.

6	38	Pride Energy Company	Kensington Tower 2250 East 73rd Street - Suite 550	Tulsa	OK	74136	Pride Energy Company	Energy Producer	San Isidro Shallow Unit Well No. 7-11	Class II	Inject salt water into a portion of the Menefee member of the Mesaverde Formation in Sandoval County, New Mexico.	W1/2 of the E1/2 and W1/2 of Section 7, the N1/2 of the NW1/4 of Section 18, Township 20 N, Range 2 W, and the E1/2 of the E1/2 of Section 12, Township 20 N, Range 3 W in Sandoval County, New Mexico.		This site is located 8 miles southwest of Cuba, Sandoval County, New Mexico. The area exempted is approx. 720 acres.	Approx. 4872 ft to 5452 ft	4590 ft	injection at a depth of 2438 ft to 2624 ft	The basal part of the Mesaverde Formation is interbedded with the Mancos Shale. The Chacra underlies the top of Mesaverde.	Approx. 580 ft	The Mesaverde Formation consists of, in ascending order, the Point Lookout Sandstone, Menefee, and Cliff House Sandstone.	less than 10,000 mg/l TDS	salt water less than 10,000 mg/l TDS	Non-substantial	State Recommendation (April 30, 1997), Regional Approval (June 27, 1997)	40 CFR 146.04. Justification for Exemption: Aquifer does not currently serve as a source of drinking water and the total dissolved solids content of the groundwater is more than 3,000 and less than 10,000 mg/lit and it is not reasonably expected to supply a public water system.
6	39	Oklahoma Corporation Commission	2101 North Lincoln Boulevard	Oklahoma City	OK	73105	Oklahoma Corporation Commission	Government Agency	Injection wells located in this area: Robco #1, Soward #1, Bray #2, Neal #1, Duncan #1, Randall #10, Quest A #1, Robertson #10, Robertson #18, Sutton B #1, Roberts #2R, Starrett #1	Class II	Inject salt water into the Bebee Field of the Viola and Simpson Aquifers in Seminole, Pottawatomie, and Pontotoc Counties, Oklahoma.	The area comprising the S/2 of Section 24, the N/2 of Section 25, and the N/2 S/2 of Section 25, Township 5 N, Range 4 E in Pontotoc County, Oklahoma. The area comprising the S/2S/2 of Section 29, the S/2 SW/4 of Section 28, the N/2 and N/2 S/2 of Section 32, the NW/4 of Section 33, and the N/2 SW/4 of Section 33, Township 5 N, Range 5 E in Pontotoc County, Oklahoma.		The approved Viola and Simpson exempted aquifers underlie portions of Seminole, Pottawatomie, and Pontotoc Counties, Oklahoma. The area of exemption is 7840 acres.	The depth of the Viola and Simpson Aquifers in this area is approx. 2,500 ft.	Robco #1 (2,864 ft), Soward #1 (2,738 ft), Bray #2 (2,633 ft), Neal #1 (2,660 ft), Duncan #1 (2,650 ft), Randall #10 (3,700 ft), Quest A #1 (2,640 ft), Robertson #10 (2,696 ft), Robertson #18, Sutton B #1 (2,520 ft), Roberts #2R (2,661 ft), Starrett #1 (2,490 ft).	Viola Aquifer: top surface 1276 to 1550 ft below sea level	There are 90 to 150 ft of Sylvan Shale directly above the Viola Formation. The Sylvan Shale is thicker than any fault throw except for the 500 ft throw of the long southside fault.	The thickness of the Viola ranges from 90 to 200 ft.	The Viola is composed of limestones and dolomites with little or no clastic deposits such as shale and sand.	less than 10,000 mg/l TDS	produced water less than 10,000 mg/l TDS and not more than 4,430 mg/l TDS	Non-substantial	State Recommendation (April 15, 1988), Regional Approval (January 2, 1989)	40 CFR 144.7 (b), 145.32, and 146.2. Justification for Exemption: (a) Aquifer is not currently used as a drinking water supply, and (b) The aquifer cannot now and will not in the future serve as a source of DW in the future because it is mineral, hydrocarbon, or geothermal energy producing, or can be demonstrated by a permit applicant as part of a permit application for a Class II or III operation to contain minerals or hydrocarbons that considering their quality and location are expected to be commercially producible.

Matrix Legend

Basic Information

- Name of Owner or Operator and Address (A)
- Company and Business Type (B)
- Injection Well ID # or Area Permit # (C)
- UIC Well Classification and Injection Activity (A description of injection activities, e.g. hazardous waste disposal into an aquifer exempted for mineral production.

Location, Delineation and Depths

- Aquifer Exemption Location (Lat/Long and or Township, Section and Range) (E)
- Aquifer Exemption Delineation (Areal Extent, Project boundary and Depths) (F)

Geology and Injectate Characteristics

- Well Depths, Subsurface Formation Names (Injection Zone and Confining Zones) (G)
- Injection Zone Hydrology parameters (Formation Depth, Thickness, Lithology and Water Quality (H)
- Injectate Characteristics (I)

Exemption Type, Criteria Cited, Approval Dates

- Type Program Revision for Exemption (Substantial or Non-Substantial) (j)
- Approval Dates (State Recommendations and Regional Approval or Concurrence (K))
- Criteria Cited (e.g., 40 CFR 146 (a) through (c)). Note: Under 146 (c), please check on the validity of the 45 day clock of automatic approval at § 145.32 and 144.7 (b)(3) (L)