

Application

Part III

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Table 1
NM Oil and Gas Wells within 2 Miles

API	OGRID	OGRID Name	Status	Well Type	Well Name	UL-S-T-R	Total Depth	Associated Pools
30-025-08354	214263	PRE-ONGARD WELL OPERATOR	P	O	PRE-ONGARD WELL #001	P-04-23S-33E	5279	<Null>
30-025-26492	217955	COG PRODUCTION, LLC	P	O	STATE HL #001	L-02-23S-33E	15640	[7320] BRINNINSTOOL, BONE SPRING
30-025-26766	25575	EOG Y RESOURCES, INC.	P	O	QUAY AQU STATE #001	C-10-23S-33E	13466	[96724] CRUZ, DELAWARE, NORTHEAST
30-025-26977	214263	PRE-ONGARD WELL OPERATOR	P	O	PRE-ONGARD WELL #001	G-14-23S-33E	830	<Null>
30-025-34076	20305	DEVON SFS OPERATING INC	C	O	THISTLE UNIT #003	G-21-23S-33E	0	<Null>
30-025-37082	4323	CHEVRON U S A INC	A	G	GURNEY 3 STATE #001	K-03-23S-33E	15665	[97468] PRONGHORN, MORROW, EAST (GAS)
30-025-39388	6137	DEVON ENERGY PRODUCTION COMPANY, LP	C	G	THISTLE UNIT #014C	P-22-23S-33E	0	[79335] JOHNSON RANCH, WOLFCAMP (GAS)
30-025-39575	6137	DEVON ENERGY PRODUCTION COMPANY, LP	C	G	THISTLE UNIT #013C	M-22-23S-33E	0	[79335] JOHNSON RANCH, WOLFCAMP (GAS)
30-025-39808	6137	DEVON ENERGY PRODUCTION COMPANY, LP	P	G	BLACK MAMBA 15 STATE #001	J-15-23S-33E	999	[97489] WILDCAT, WOLFCAMP GAS (ABOLISHED)
30-025-40136	6137	DEVON ENERGY PRODUCTION COMPANY, LP	C	O	THISTLE UNIT #025C	A-21-23S-33E	0	[96193] BRINNINSTOOL, DELAWARE
30-025-40173	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	O	BLACK MAMBA 15 STATE COM #002H	D-15-23S-33E	11230	[14865] CRUZ, BONE SPRING; [96724] CRUZ, DELAWARE, NORTHEAST
30-025-40619	215099	CIMAREX ENERGY CO.	A	O	BLANCO 3 STATE COM #001H	O-03-23S-33E	11085	[7320] BRINNINSTOOL, BONE SPRING
30-025-40620	215099	CIMAREX ENERGY CO.	C	O	BLANCO 3 STATE COM #002C	P-03-23S-33E	0	[7320] BRINNINSTOOL, BONE SPRING
30-025-40622	215099	CIMAREX ENERGY CO.	C	O	BLANCO 3 STATE COM #003C	O-03-23S-33E	0	[7320] BRINNINSTOOL, BONE SPRING
30-025-40623	215099	CIMAREX ENERGY CO.	C	O	BLANCO 3 STATE COM #004C	O-03-23S-33E	0	[7320] BRINNINSTOOL, BONE SPRING
30-025-40624	215099	CIMAREX ENERGY CO.	C	O	BLANCO 3 STATE COM #005C	P-03-23S-33E	0	[7320] BRINNINSTOOL, BONE SPRING
30-025-40625	215099	CIMAREX ENERGY CO.	C	O	BLANCO 3 STATE COM #006C	P-03-23S-33E	0	[7320] BRINNINSTOOL, BONE SPRING
30-025-40733	217955	COG PRODUCTION, LLC	A	O	SOPAPILLA STATE #001H	M-02-23S-33E	11118	[7320] BRINNINSTOOL, BONE SPRING
30-025-40743	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	O	TAIPAN 10 STATE COM #001H	D-15-23S-33E	11220	[7320] BRINNINSTOOL, BONE SPRING; [14865] CRUZ, BONE SPRING; [96724] CRUZ, DELAWARE, NORTHEAST
30-025-40855	217955	COG PRODUCTION, LLC	A	O	BEBIDAS STATE #002H	N-16-23S-33E	11175	[14865] CRUZ, BONE SPRING
30-025-40856	217955	COG PRODUCTION, LLC	A	O	BEBIDAS STATE #003H	O-16-23S-33E	10827	[14865] CRUZ, BONE SPRING
30-025-40857	217955	COG PRODUCTION, LLC	A	O	BEBIDAS STATE #004H	P-16-23S-33E	11202	[14865] CRUZ, BONE SPRING
30-025-40858	217955	COG PRODUCTION, LLC	A	O	SOPAPILLA STATE #002H	N-02-23S-33E	10930	[7320] BRINNINSTOOL, BONE SPRING
30-025-41143	6137	DEVON ENERGY PRODUCTION COMPANY, LP	C	O	TAIPAN 10 STATE COM #002C	B-15-23S-33E	0	[7320] BRINNINSTOOL, BONE SPRING
30-025-41144	6137	DEVON ENERGY PRODUCTION COMPANY, LP	C	O	TAIPAN 10 STATE COM #003C	B-15-23S-33E	0	[7320] BRINNINSTOOL, BONE SPRING
30-025-41145	6137	DEVON ENERGY PRODUCTION COMPANY, LP	C	O	TAIPAN 10 STATE COM #004C	B-15-23S-33E	0	[7320] BRINNINSTOOL, BONE SPRING
30-025-41330	4323	CHEVRON U S A INC	A	O	BRINSTOOL 23 23 33 USA #001H	B-23-23S-33E	11310	[5150] BELL LAKE, BONE SPRING, NORTH
30-025-41331	4323	CHEVRON U S A INC	A	O	BRINSTOOL 23 23 33 USA #002H	A-23-23S-33E	11266	[5150] BELL LAKE, BONE SPRING, NORTH
30-025-41340	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	O	THISTLE UNIT #056H	O-22-23S-33E	11268	[59900] TRIPLE X, BONE SPRING
30-025-41341	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	O	THISTLE UNIT #057H	O-22-23S-33E	11301	[59900] TRIPLE X, BONE SPRING
30-025-41342	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	O	THISTLE UNIT #058H	O-22-23S-33E	11265	[59900] TRIPLE X, BONE SPRING
30-025-41360	4323	CHEVRON U S A INC	A	O	LIMESTONE 11 23 33 FEDERAL #001H	D-11-23S-33E	11113	[7320] BRINNINSTOOL, BONE SPRING
30-025-41466	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	O	THISTLE UNIT #062H	O-22-23S-33E	11080	[59900] TRIPLE X, BONE SPRING
30-025-41467	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	O	THISTLE UNIT #063H	O-22-23S-33E	11056	[59900] TRIPLE X, BONE SPRING
30-025-41468	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	O	THISTLE UNIT #064H	O-22-23S-33E	11090	[59900] TRIPLE X, BONE SPRING
30-025-41481	4323	CHEVRON U S A INC	H	O	BELL LAKE 18 23 34 #001	2-18-23S-34E	5037	[5150] BELL LAKE, BONE SPRING, NORTH
30-025-41934	4323	CHEVRON U S A INC	C	O	BRININSTOOL 24 23 33 USA #001C	D-24-23S-33E	0	[5150] BELL LAKE, BONE SPRING, NORTH
30-025-41935	4323	CHEVRON U S A INC	A	O	BRININSTOOL 24 23 33 USA #002H	C-24-23S-33E	11050	[5150] BELL LAKE, BONE SPRING, NORTH
30-025-41936	4323	CHEVRON U S A INC	C	O	BRININSTOOL 24 23 33 USA #003C	B-24-23S-33E	0	[5150] BELL LAKE, BONE SPRING, NORTH
30-025-41937	4323	CHEVRON U S A INC	C	O	BRININSTOOL 24 23 33 USA #004C	A-24-23S-33E	0	[5150] BELL LAKE, BONE SPRING, NORTH
30-025-41975	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	O	HOGNOSE VIPER 23 FEDERAL #001H	M-23-23S-33E	11196	[5150] BELL LAKE, BONE SPRING, NORTH
30-025-41976	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	O	HOGNOSE VIPER 23 FEDERAL #002H	M-23-23S-33E	11235	[5150] BELL LAKE, BONE SPRING, NORTH
30-025-42162	6137	DEVON ENERGY PRODUCTION COMPANY, LP	C	O	BLACK MAMBA 15 STATE COM #003C	B-15-23S-33E	0	[7320] BRINNINSTOOL, BONE SPRING; [14865] CRUZ, BONE SPRING
30-025-42163	6137	DEVON ENERGY PRODUCTION COMPANY, LP	C	O	BLACK MAMBA 15 STATE COM #004C	B-15-23S-33E	0	[7320] BRINNINSTOOL, BONE SPRING; [14865] CRUZ, BONE SPRING
30-025-42164	6137	DEVON ENERGY PRODUCTION COMPANY, LP	C	O	BLACK MAMBA 15 STATE COM #005C	B-15-23S-33E	0	[7320] BRINNINSTOOL, BONE SPRING; [14865] CRUZ, BONE SPRING
30-025-42277	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	O	TAIPAN 10 STATE COM #008H	D-15-23S-33E	9296	[96724] CRUZ, DELAWARE, NORTHEAST
30-025-42422	6137	DEVON ENERGY PRODUCTION COMPANY, LP	C	O	BLACK MAMBA 15 STATE COM #006C	D-15-23S-33E	0	[96724] CRUZ, DELAWARE, NORTHEAST
30-025-42425	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	O	THISTLE UNIT #071H	A-27-23S-33E	10509	[59900] TRIPLE X, BONE SPRING
30-025-42464	7377	EOG RESOURCES INC	H	O	DRIVER BVE STATE #002	E-14-23S-33E	55	[5150] BELL LAKE, BONE SPRING, NORTH
30-025-42479	6137	DEVON ENERGY PRODUCTION COMPANY, LP	C	O	NORTH THISTLE 15 10 STATE COM #002C	M-15-23S-33E	0	[7320] BRINNINSTOOL, BONE SPRING
30-025-42570	229137	COG OPERATING LLC	N	O	CHIVO 9 FEDERAL #002H	N-09-23S-33E	0	[7320] BRINNINSTOOL, BONE SPRING
30-025-42623	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	O	BLACK MAMBA 15 STATE COM #007H	P-10-23S-33E	11162	[7320] BRINNINSTOOL, BONE SPRING
30-025-42630	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	O	BLACK MAMBA 15 STATE COM #008H	P-10-23S-33E	10798	[7320] BRINNINSTOOL, BONE SPRING
30-025-42631	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	O	BLACK MAMBA 15 STATE COM #009H	P-10-23S-33E	11143	[7320] BRINNINSTOOL, BONE SPRING
30-025-42679	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	O	THISTLE UNIT #094H	D-22-23S-33E	10638	[59900] TRIPLE X, BONE SPRING
30-025-42680	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	O	THISTLE UNIT #109H	D-22-23S-33E	10101	[59900] TRIPLE X, BONE SPRING
30-025-42681	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	O	THISTLE UNIT #124H	D-22-23S-33E	9777	[59900] TRIPLE X, BONE SPRING
30-025-42784	6137	DEVON ENERGY PRODUCTION COMPANY, LP	C	O	THISTLE UNIT #096C	A-22-23S-33E	0	[59900] TRIPLE X, BONE SPRING
30-025-42785	6137	DEVON ENERGY PRODUCTION COMPANY, LP	C	O	THISTLE UNIT #111C	A-22-23S-33E	0	[59900] TRIPLE X, BONE SPRING
30-025-42786	6137	DEVON ENERGY PRODUCTION COMPANY, LP	N	O	THISTLE UNIT #126H	A-22-23S-33E	0	[59900] TRIPLE X, BONE SPRING
30-025-43071	7377	EOG RESOURCES INC	A	O	DRIVER 14 STATE COM #502H	D-14-23S-33E	11185	[5150] BELL LAKE, BONE SPRING, NORTH

Table 1
NM Oil and Gas Wells within 2 Miles

API	OGRID	OGRID Name	Status	Well Type	Well Name	UL-S-T-R	Total Depth	Associated Pools
30-025-43199	6137	DEVON ENERGY PRODUCTION COMPANY, LP	N	O	HOGNOSE VIPER 23 FEDERAL #004H	N-23-23S-33E	0	[5150] BELL LAKE, BONE SPRING, NORTH
30-025-43202	6137	DEVON ENERGY PRODUCTION COMPANY, LP	N	O	HOGNOSE VIPER 23 FEDERAL #006H	N-23-23S-33E	0	[5150] BELL LAKE, BONE SPRING, NORTH
30-025-43204	6137	DEVON ENERGY PRODUCTION COMPANY, LP	N	O	HOGNOSE VIPER 23 FEDERAL #008H	N-23-23S-33E	0	[5150] BELL LAKE, BONE SPRING, NORTH
30-025-43311	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	O	THISTLE UNIT #110H	C-22-23S-33E	9736	[59900] TRIPLE X, BONE SPRING
30-025-43315	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	O	THISTLE UNIT #114H	C-22-23S-33E	9758	[59900] TRIPLE X, BONE SPRING
30-025-43316	6137	DEVON ENERGY PRODUCTION COMPANY, LP	N	O	THISTLE UNIT #115	B-22-23S-33E	0	[59900] TRIPLE X, BONE SPRING
30-025-43317	6137	DEVON ENERGY PRODUCTION COMPANY, LP	C	O	THISTLE UNIT #116C	B-22-23S-33E	0	[59900] TRIPLE X, BONE SPRING
30-025-43381	6137	DEVON ENERGY PRODUCTION COMPANY, LP	N	O	THISTLE UNIT #107H	B-21-23S-33E	0	[59900] TRIPLE X, BONE SPRING
30-025-43382	6137	DEVON ENERGY PRODUCTION COMPANY, LP	N	O	THISTLE UNIT #122H	B-21-23S-33E	0	[59900] TRIPLE X, BONE SPRING
30-025-43542	215099	CIMAREX ENERGY CO.	A	O	AZUL 13 STATE FEDERAL COM #001H	D-13-23S-33E	9711	[5150] BELL LAKE, BONE SPRING, NORTH
30-025-43709	6137	DEVON ENERGY PRODUCTION COMPANY, LP	N	O	THISTLE UNIT #105H	A-21-23S-33E	0	[59900] TRIPLE X, BONE SPRING
30-025-43710	6137	DEVON ENERGY PRODUCTION COMPANY, LP	N	O	THISTLE UNIT #119H	A-21-23S-33E	0	[59900] TRIPLE X, BONE SPRING
30-025-43727	6137	DEVON ENERGY PRODUCTION COMPANY, LP	N	O	THISTLE UNIT #108H	A-21-23S-33E	0	[59900] TRIPLE X, BONE SPRING
30-025-43732	6137	DEVON ENERGY PRODUCTION COMPANY, LP	N	O	THISTLE UNIT #121H	A-21-23S-33E	0	[59900] TRIPLE X, BONE SPRING
30-025-44066	6137	DEVON ENERGY PRODUCTION COMPANY, LP	C	O	THISTLE UNIT #099C	C-22-23S-33E	0	[59900] TRIPLE X, BONE SPRING
30-025-44068	6137	DEVON ENERGY PRODUCTION COMPANY, LP	C	O	THISTLE UNIT #161C	C-22-23S-33E	0	[59900] TRIPLE X, BONE SPRING
30-025-44069	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	O	THISTLE UNIT #133H	C-22-23S-33E	10088	[59900] TRIPLE X, BONE SPRING
30-025-44070	6137	DEVON ENERGY PRODUCTION COMPANY, LP	N	O	THISTLE UNIT #160	C-22-23S-33E	0	[59900] TRIPLE X, BONE SPRING
30-025-44071	6137	DEVON ENERGY PRODUCTION COMPANY, LP	C	O	THISTLE UNIT #168C	A-22-23S-33E	0	[59900] TRIPLE X, BONE SPRING
30-025-44079	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	O	THISTLE UNIT #086H	C-22-23S-33E	10649	[59900] TRIPLE X, BONE SPRING
30-025-44080	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	O	THISTLE UNIT #125H	C-22-23S-33E	10073	[59900] TRIPLE X, BONE SPRING
30-025-44081	6137	DEVON ENERGY PRODUCTION COMPANY, LP	P	O	THISTLE UNIT #142	D-22-23S-33E	1465	[59900] TRIPLE X, BONE SPRING
30-025-44082	6137	DEVON ENERGY PRODUCTION COMPANY, LP	C	O	THISTLE UNIT #165C	B-22-23S-33E	0	[59900] TRIPLE X, BONE SPRING
30-025-44083	6137	DEVON ENERGY PRODUCTION COMPANY, LP	N	O	THISTLE UNIT #162	B-22-23S-33E	0	[59900] TRIPLE X, BONE SPRING
30-025-44084	6137	DEVON ENERGY PRODUCTION COMPANY, LP	N	O	THISTLE UNIT #127	B-22-23S-33E	0	[59900] TRIPLE X, BONE SPRING
30-025-44085	6137	DEVON ENERGY PRODUCTION COMPANY, LP	C	O	THISTLE UNIT #100C	B-22-23S-33E	0	[59900] TRIPLE X, BONE SPRING
30-025-44086	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	O	THISTLE UNIT #128H	B-22-23S-33E	9745	[59900] TRIPLE X, BONE SPRING
30-025-44416	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	O	THISTLE UNIT #099H	C-22-23S-33E	10670	[59900] TRIPLE X, BONE SPRING
30-025-44417	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	O	THISTLE UNIT #100H	B-22-23S-33E	10682	[59900] TRIPLE X, BONE SPRING
30-025-44418	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	O	THISTLE UNIT #111H	A-22-23S-33E	10658	[59900] TRIPLE X, BONE SPRING
30-025-44419	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	O	THISTLE UNIT #115H	C-22-23S-33E	9744	[59900] TRIPLE X, BONE SPRING
30-025-44420	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	O	THISTLE UNIT #116H	B-22-23S-33E	9750	[59900] TRIPLE X, BONE SPRING
30-025-44421	6137	DEVON ENERGY PRODUCTION COMPANY, LP	A	O	THISTLE UNIT #127H	B-22-23S-33E	10086	[59900] TRIPLE X, BONE SPRING
30-025-44691	12361	KAISER-FRANCIS OIL CO	N	O	BELL LAKE UNIT NORTH #301H	E-01-23S-33E	0	[5150] BELL LAKE, BONE SPRING, NORTH
30-025-45070	6137	DEVON ENERGY PRODUCTION COMPANY, LP	N	O	NORTH THISTLE 3 34 STATE COM #001H	N-03-23S-33E	0	[7320] BRINNINSTOOL, BONE SPRING
30-025-45071	6137	DEVON ENERGY PRODUCTION COMPANY, LP	N	O	NORTH THISTLE 3 34 STATE COM #002H	N-03-23S-33E	0	[7320] BRINNINSTOOL, BONE SPRING
30-025-45072	6137	DEVON ENERGY PRODUCTION COMPANY, LP	N	O	NORTH THISTLE 3 34 STATE COM #003H	N-03-23S-33E	0	[7320] BRINNINSTOOL, BONE SPRING
30-025-45073	6137	DEVON ENERGY PRODUCTION COMPANY, LP	N	O	NORTH THISTLE 3 34 STATE COM #004H	P-03-23S-33E	0	[7320] BRINNINSTOOL, BONE SPRING
30-025-45074	6137	DEVON ENERGY PRODUCTION COMPANY, LP	N	O	NORTH THISTLE 3 34 STATE COM #005H	P-03-23S-33E	0	[7320] BRINNINSTOOL, BONE SPRING
30-025-45075	6137	DEVON ENERGY PRODUCTION COMPANY, LP	N	O	NORTH THISTLE 3 34 STATE COM #006H	P-03-23S-33E	0	[7320] BRINNINSTOOL, BONE SPRING
30-025-45392	6137	DEVON ENERGY PRODUCTION COMPANY, LP	N	O	NORTH THISTLE 15 10 STATE COM #001H	M-15-23S-33E	0	[7320] BRINNINSTOOL, BONE SPRING
30-025-45393	6137	DEVON ENERGY PRODUCTION COMPANY, LP	N	O	NORTH THISTLE 15 10 STATE COM #002H	M-15-23S-33E	0	[7320] BRINNINSTOOL, BONE SPRING
30-025-45394	6137	DEVON ENERGY PRODUCTION COMPANY, LP	N	O	NORTH THISTLE 15 10 STATE COM #003H	N-15-23S-33E	0	[7320] BRINNINSTOOL, BONE SPRING
30-025-45395	6137	DEVON ENERGY PRODUCTION COMPANY, LP	N	O	NORTH THISTLE 15 10 STATE COM #004H	O-15-23S-33E	0	[7320] BRINNINSTOOL, BONE SPRING
30-025-45396	6137	DEVON ENERGY PRODUCTION COMPANY, LP	N	O	NORTH THISTLE 15 10 STATE COM #005H	P-15-23S-33E	0	[7320] BRINNINSTOOL, BONE SPRING
30-025-45397	6137	DEVON ENERGY PRODUCTION COMPANY, LP	N	O	NORTH THISTLE 15 10 STATE COM #006H	P-15-23S-33E	0	[7320] BRINNINSTOOL, BONE SPRING
30-025-45509	12361	KAISER-FRANCIS OIL CO	N	O	BELL LAKE UNIT NORTH #119H	L-01-23S-33E	0	[98259] OJO CHISO, BONE SPRING, SOUTHWEST
30-025-45510	12361	KAISER-FRANCIS OIL CO	N	O	BELL LAKE UNIT NORTH #211H	L-01-23S-33E	0	[98259] OJO CHISO, BONE SPRING, SOUTHWEST

Table 2a
BLM Oil and Gas Leases within 1-Mile

Lease Number		Name	Township	Range	Section	Unit Letter
NMNM	114985	CHEVRON USA INC	23S	33E	11	B
NMNM	114985	CHEVRON USA INC	23S	33E	11	C
NMNM	114985	CHEVRON USA INC	23S	33E	11	D
NMNM	114985	CHEVRON USA INC	23S	33E	11	E
NMNM	114985	CHEVRON USA INC	23S	33E	11	F
NMNM	114985	CHEVRON USA INC	23S	33E	11	G
NMNM	114985	CHEVRON USA INC	23S	33E	11	H
NMNM	114985	CHEVRON USA INC	23S	33E	11	I
NMNM	114985	CHEVRON USA INC	23S	33E	11	J
NMNM	114985	CHEVRON USA INC	23S	33E	11	K
NMNM	114985	CHEVRON USA INC	23S	33E	11	L
NMNM	114985	CHEVRON USA INC	23S	33E	11	M
NMNM	114985	CHEVRON USA INC	23S	33E	11	N
NMNM	114985	CHEVRON USA INC	23S	33E	11	O
NMNM	114985	CHEVRON USA INC	23S	33E	11	P
NMNM	114985	CHEVRON USA INC	23S	33E	14	K
NMNM	114985	CHEVRON USA INC	23S	33E	14	L
NMNM	114985	CHEVRON USA INC	23S	33E	14	M
NMNM	114985	CHEVRON USA INC	23S	33E	14	N
NMNM	114986	CHEVRON USA INC	23S	33E	13	L
NMNM	114986	CHEVRON USA INC	23S	33E	23	B
NMNM	121489	DEVON ENERGY PROD CO LP	23S	33E	23	C
NMNM	121489	DEVON ENERGY PROD CO LP	23S	33E	23	D
NMNM	126493	EOG Y RESOURCES INC	23S	33E	14	I
NMNM	126493	EOG Y RESOURCES INC	23S	33E	14	J
NMNM	126493	EOG Y RESOURCES INC	23S	33E	14	O
NMNM	126493	EOG Y RESOURCES INC	23S	33E	14	P

Lease Number	Ogrid	Ogrid Namer	Township	Range	Section	Unit Letter
E059990002	149315	MAGNUM HUNTER PRODUCTION, INC.	23S	33E	12	L
E059990002	149315	MAGNUM HUNTER PRODUCTION, INC.	23S	33E	12	M
V028180001	166111	DEVON ENERGY PRODUCTION CO.	23S	33E	22	A
V028180001	166111	DEVON ENERGY PRODUCTION CO.	23S	33E	22	B
V082400000	6137	DEVON ENERGY PRODUCTION COMPANY, LP	23S	33E	10	A
V082400000	6137	DEVON ENERGY PRODUCTION COMPANY, LP	23S	33E	10	F
V082400000	6137	DEVON ENERGY PRODUCTION COMPANY, LP	23S	33E	10	G
V082400000	6137	DEVON ENERGY PRODUCTION COMPANY, LP	23S	33E	10	H
V082640000	6137	DEVON ENERGY PRODUCTION COMPANY, LP	23S	33E	10	I
V082640000	6137	DEVON ENERGY PRODUCTION COMPANY, LP	23S	33E	10	J
V082640000	6137	DEVON ENERGY PRODUCTION COMPANY, LP	23S	33E	10	K
V082640000	6137	DEVON ENERGY PRODUCTION COMPANY, LP	23S	33E	10	L
V082640000	6137	DEVON ENERGY PRODUCTION COMPANY, LP	23S	33E	10	M
V082640000	6137	DEVON ENERGY PRODUCTION COMPANY, LP	23S	33E	10	N
V082640000	6137	DEVON ENERGY PRODUCTION COMPANY, LP	23S	33E	10	O
V082640000	6137	DEVON ENERGY PRODUCTION COMPANY, LP	23S	33E	10	P
VB07290002	6137	DEVON ENERGY PRODUCTION COMPANY, LP	23S	33E	15	I
VB07290002	6137	DEVON ENERGY PRODUCTION COMPANY, LP	23S	33E	15	J
VB07290002	6137	DEVON ENERGY PRODUCTION COMPANY, LP	23S	33E	15	K
VB07290002	6137	DEVON ENERGY PRODUCTION COMPANY, LP	23S	33E	15	L
VB07290002	6137	DEVON ENERGY PRODUCTION COMPANY, LP	23S	33E	15	N
VB07290002	6137	DEVON ENERGY PRODUCTION COMPANY, LP	23S	33E	15	O
VB07290002	6137	DEVON ENERGY PRODUCTION COMPANY, LP	23S	33E	15	P
VB07430000	6137	DEVON ENERGY PRODUCTION COMPANY, LP	23S	33E	15	A
VB07430000	6137	DEVON ENERGY PRODUCTION COMPANY, LP	23S	33E	15	B
VB07430000	6137	DEVON ENERGY PRODUCTION COMPANY, LP	23S	33E	15	C
VB07430000	6137	DEVON ENERGY PRODUCTION COMPANY, LP	23S	33E	15	D
VB07430000	6137	DEVON ENERGY PRODUCTION COMPANY, LP	23S	33E	15	E
VB07430000	6137	DEVON ENERGY PRODUCTION COMPANY, LP	23S	33E	15	F
VB07430000	6137	DEVON ENERGY PRODUCTION COMPANY, LP	23S	33E	15	G
VB07430000	6137	DEVON ENERGY PRODUCTION COMPANY, LP	23S	33E	15	H
VB18620001	7377	EOG RESOURCES INC	23S	33E	14	A
VB18620001	7377	EOG RESOURCES INC	23S	33E	14	B
VB18620001	7377	EOG RESOURCES INC	23S	33E	14	C
VB18620001	7377	EOG RESOURCES INC	23S	33E	14	D
VB18620001	7377	EOG RESOURCES INC	23S	33E	14	E
VB18620001	7377	EOG RESOURCES INC	23S	33E	14	F
VB18620001	7377	EOG RESOURCES INC	23S	33E	14	G
VB18620001	7377	EOG RESOURCES INC	23S	33E	14	H
VB21520001	252846	CIMAREX ENERGY CO.	23S	33E	13	D
VB21520001	252846	CIMAREX ENERGY CO.	23S	33E	13	E

Table 2c
Surface Ownership within 1-Mile

Township	Range	Section	Unit Letter	UPC	Name	Address	City	State	Zip
23S	33E	10	A	4195134266265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	10	F	4195134266265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	10	G	4195134266265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	10	H	4195134266265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	10	I	4195134266265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	10	J	4195134266265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	10	K	4195134266265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	10	L	4195134266265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	10	M	4195134266265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	10	N	4195134266265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	10	O	4195134266265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	10	P	4195134266265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	11	B	4196134265265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	11	C	4196134265265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	11	D	4196134265265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	11	E	4196134265265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	11	F	4196134265265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	11	G	4196134265265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	11	H	4196134265265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	11	I	4196134265265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	11	J	4196134265265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	11	K	4196134265265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	11	L	4196134265265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	11	M	4196134265265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	11	N	4196134265265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	11	O	4196134265265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	11	P	4196134265265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	12	L	4197134134266	LIMESTONE BASIN PROP RANCH LLC	18 DESTA DRIVE	MIDLAND	TX	79705
23S	33E	12	M	4197134310265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	13	D	4197135265133	LIMESTONE BASIN PROP RANCH LLC	18 DESTA DRIVE	MIDLAND	TX	79705
23S	33E	13	E	4197135265133	LIMESTONE BASIN PROP RANCH LLC	18 DESTA DRIVE	MIDLAND	TX	79705
23S	33E	13	L	4197135267397	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	14	A	4196135264133	LIMESTONE BASIN PROP RANCH LLC	18 DESTA DRIVE	MIDLAND	TX	79705
23S	33E	14	B	4196135264133	LIMESTONE BASIN PROP RANCH LLC	18 DESTA DRIVE	MIDLAND	TX	79705
23S	33E	14	C	4196135264133	LIMESTONE BASIN PROP RANCH LLC	18 DESTA DRIVE	MIDLAND	TX	79705
23S	33E	14	D	4196135264133	LIMESTONE BASIN PROP RANCH LLC	18 DESTA DRIVE	MIDLAND	TX	79705
23S	33E	14	E	4196135264133	LIMESTONE BASIN PROP RANCH LLC	18 DESTA DRIVE	MIDLAND	TX	79705
23S	33E	14	F	4196135264133	LIMESTONE BASIN PROP RANCH LLC	18 DESTA DRIVE	MIDLAND	TX	79705
23S	33E	14	G	4196135264133	LIMESTONE BASIN PROP RANCH LLC	18 DESTA DRIVE	MIDLAND	TX	79705
23S	33E	14	H	4196135264133	LIMESTONE BASIN PROP RANCH LLC	18 DESTA DRIVE	MIDLAND	TX	79705
23S	33E	14	I	4196135266397	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	14	J	4196135266397	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	14	K	4196135266397	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	14	L	4196135266397	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	14	M	4196135266397	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	14	N	4196135266397	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	14	O	4196135266397	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	14	P	4196135266397	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501

Table 2c
Surface Ownership within 1-Mile

Township	Range	Section	Unit Letter	UPC	Name	Address	City	State	Zip
23S	33E	15	A	4195135266265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	15	B	4195135266265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	15	C	4195135266265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	15	D	4195135266265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	15	E	4195135266265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	15	F	4195135266265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	15	G	4195135266265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	15	H	4195135266265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	15	I	4195135266265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	15	J	4195135266265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	15	K	4195135266265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	15	L	4195135266265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	15	N	4195135266265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	15	O	4195135266265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	15	P	4195135266265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	22	A	4195136266265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	22	B	4195136266265	STATE OF NEW MEXICO	310 Old Santa Fe Trail	Santa Fe	NM	87501
23S	33E	23	B	4196136265265	BLM	620 E. Greene Street	Carlsbad	NM	88220-6292
23S	33E	23	C	4196136265265	BLM	620 E. Greene Street	Carlsbad	NM	88220-6292
23S	33E	23	D	4196136265265	BLM	620 E. Greene Street	Carlsbad	NM	88220-6292

Table 2d
Mineral Ownership within 1-Mile

Township	Range	Section	Unit Letter	Mineral Ownership	Description
23S	33E	10	A	State (NM)	No minerals are owned by the BLM (U.S)
23S	33E	10	F	State (NM)	No minerals are owned by the BLM (U.S)
23S	33E	10	G	State (NM)	No minerals are owned by the BLM (U.S)
23S	33E	10	H	State (NM)	No minerals are owned by the BLM (U.S)
23S	33E	10	I	State (NM)	No minerals are owned by the BLM (U.S)
23S	33E	10	J	State (NM)	No minerals are owned by the BLM (U.S)
23S	33E	10	K	State (NM)	No minerals are owned by the BLM (U.S)
23S	33E	10	L	State (NM)	No minerals are owned by the BLM (U.S)
23S	33E	10	M	State (NM)	No minerals are owned by the BLM (U.S)
23S	33E	10	N	State (NM)	No minerals are owned by the BLM (U.S)
23S	33E	10	O	State (NM)	No minerals are owned by the BLM (U.S)
23S	33E	10	P	State (NM)	No minerals are owned by the BLM (U.S)
23S	33E	11	B	BLM (USA)	All minerals are owned by the BLM (U.S.)
23S	33E	11	C	BLM (USA)	All minerals are owned by the BLM (U.S.)
23S	33E	11	D	BLM (USA)	All minerals are owned by the BLM (U.S.)
23S	33E	11	E	BLM (USA)	All minerals are owned by the BLM (U.S.)
23S	33E	11	F	BLM (USA)	All minerals are owned by the BLM (U.S.)
23S	33E	11	G	BLM (USA)	All minerals are owned by the BLM (U.S.)
23S	33E	11	H	BLM (USA)	All minerals are owned by the BLM (U.S.)
23S	33E	11	I	BLM (USA)	All minerals are owned by the BLM (U.S.)
23S	33E	11	J	BLM (USA)	All minerals are owned by the BLM (U.S.)
23S	33E	11	K	BLM (USA)	All minerals are owned by the BLM (U.S.)
23S	33E	11	L	BLM (USA)	All minerals are owned by the BLM (U.S.)
23S	33E	11	M	BLM (USA)	All minerals are owned by the BLM (U.S.)
23S	33E	11	N	BLM (USA)	All minerals are owned by the BLM (U.S.)
23S	33E	11	O	BLM (USA)	All minerals are owned by the BLM (U.S.)
23S	33E	11	P	BLM (USA)	All minerals are owned by the BLM (U.S.)
23S	33E	12	L	State (NM)	No minerals are owned by the BLM (U.S)
23S	33E	12	M	State (NM)	No minerals are owned by the BLM (U.S)
23S	33E	13	D	State (NM)	No minerals are owned by the BLM (U.S)
23S	33E	13	E	State (NM)	No minerals are owned by the BLM (U.S)
23S	33E	13	L	BLM (USA)	All minerals are owned by the BLM (U.S.)
23S	33E	14	A	State (NM)	No minerals are owned by the BLM (U.S)
23S	33E	14	B	State (NM)	No minerals are owned by the BLM (U.S)
23S	33E	14	C	State (NM)	No minerals are owned by the BLM (U.S)
23S	33E	14	D	State (NM)	No minerals are owned by the BLM (U.S)
23S	33E	14	E	State (NM)	No minerals are owned by the BLM (U.S)
23S	33E	14	F	State (NM)	No minerals are owned by the BLM (U.S)
23S	33E	14	G	State (NM)	No minerals are owned by the BLM (U.S)
23S	33E	14	H	State (NM)	No minerals are owned by the BLM (U.S)
23S	33E	14	I	BLM (USA)	All minerals are owned by the BLM (U.S.)
23S	33E	14	J	BLM (USA)	All minerals are owned by the BLM (U.S.)
23S	33E	14	K	BLM (USA)	All minerals are owned by the BLM (U.S.)
23S	33E	14	L	BLM (USA)	All minerals are owned by the BLM (U.S.)
23S	33E	14	M	BLM (USA)	All minerals are owned by the BLM (U.S.)
23S	33E	14	N	BLM (USA)	All minerals are owned by the BLM (U.S.)
23S	33E	14	O	BLM (USA)	All minerals are owned by the BLM (U.S.)
23S	33E	14	P	BLM (USA)	All minerals are owned by the BLM (U.S.)

Township	Range	Section	Unit Letter	Mineral Ownership	Description
23S	33E	15	A	State (NM)	No minerals are owned by the BLM (U.S.)
23S	33E	15	B	State (NM)	No minerals are owned by the BLM (U.S.)
23S	33E	15	C	State (NM)	No minerals are owned by the BLM (U.S.)
23S	33E	15	D	State (NM)	No minerals are owned by the BLM (U.S.)
23S	33E	15	E	State (NM)	No minerals are owned by the BLM (U.S.)
23S	33E	15	F	State (NM)	No minerals are owned by the BLM (U.S.)
23S	33E	15	G	State (NM)	No minerals are owned by the BLM (U.S.)
23S	33E	15	H	State (NM)	No minerals are owned by the BLM (U.S.)
23S	33E	15	I	State (NM)	No minerals are owned by the BLM (U.S.)
23S	33E	15	J	State (NM)	No minerals are owned by the BLM (U.S.)
23S	33E	15	K	State (NM)	No minerals are owned by the BLM (U.S.)
23S	33E	15	L	State (NM)	No minerals are owned by the BLM (U.S.)
23S	33E	15	N	State (NM)	No minerals are owned by the BLM (U.S.)
23S	33E	15	O	State (NM)	No minerals are owned by the BLM (U.S.)
23S	33E	15	P	State (NM)	No minerals are owned by the BLM (U.S.)
23S	33E	22	A	State (NM)	No minerals are owned by the BLM (U.S.)
23S	33E	22	B	State (NM)	No minerals are owned by the BLM (U.S.)
23S	33E	23	B	BLM (USA)	All minerals are owned by the BLM (U.S.)
23S	33E	23	C	BLM (USA)	All minerals are owned by the BLM (U.S.)
23S	33E	23	D	BLM (USA)	All minerals are owned by the BLM (U.S.)

Table 3
Produced Water

wellname	api	section	township	range	unit	county	state	field	formation	samplesource	sampledate	ph	specificgravity	tds_mgl	resistivity_ohm_cm	sodium_mgl	calcium_mgl	iron_mgl	magnesium_mgl	manganese_mgl	chloride_mgl	bicarbonate_mgl	sulfate_mgl	co2_mgl	CorrectFlag
RIO BLANCO 4 FEDERAL COM #003	3002536425	4	23S	34E	J	Lea	NM	BELL LAKE NORTH SWD	DEVONIAN DELAWARE	HEATER TREATER UNKNOWN	9/3/2014 0:00	6.1		179000.8		53519.9	12080.6	38.7	1748.7	2.4	109000	122	0	200	FALSE
BELL LAKE UNIT #006	3002508483	6	23S	34E	O	LEA	NM					7		71078							42200	500	1000		TRUE
BELL LAKE UNIT #002	3002508489	30	23S	34E	N	LEA	NM							52115							32200	451	529		TRUE
RIO BLANCO 4 FEDERAL COM #003	3002536425	4	23S	34E	J	Lea	NM				10/15/2015 0:00	7		254017.1	0.025	62818	24835.8	47	4233.5	5.48	160463.8	244	425	1000	FALSE
MAD DOG 15 FEDERAL COM #001	3002536778	15	23S	34E	P	Lea	NM				10/15/2015 0:00	6.07		185742	0.034	60151.2	9297	80.6	1501	1.68	113474.4	341.6	560	800	FALSE
CABALLO 9 STATE #001	3002534577	9	23S	34E	E	Lea	NM				9/10/2014 0:00	7.81		71862.4		24399.6	2685.9	462.1	367.8	2.86	42700	576	0	0	FALSE
MAD DOG 15 FEDERAL COM #001	3002536778	15	23S	34E	P	Lea	NM				9/10/2014 0:00	6.9		71718.6		23830.8	2540	0	346.3	0	42400	610	170	100	FALSE
RIO BLANCA 4 FEDERAL COM #001	3002534515	4	23S	34E	F	Lea	NM				9/8/2004 0:00	6.1		43388.1		13982.1	1697	363	243		25721	207	574		FALSE
RIO BLANCA 4 FEDERAL COM #001	3002534515	4	23S	34E	F	Lea	NM				12/16/2004 0:00	6.1		70316.5		25492.9	1361	7	162		41669	228.1	1011	100	FALSE
RIO BLANCO 9 STATE #001	3002536302	9	23S	34E	B	Lea	NM				12/16/2004 0:00	5.6		65810.3		15070.8	6754	28	2137		41261	165.9	277		FALSE
MAD DOG 15 FEDERAL COM #001	3002536778	15	23S	34E	P	Lea	NM	12/16/2004 0:00	6.2		71521.1		25245.7	1754	5	255		42308	207.4	1176	75	FALSE			
RIO BLANCA 4 FEDERAL COM #001	3002534515	4	23S	34E	F	Lea	NM	4/26/2005 0:00	5.7		84267.8		28936.1	2670	64	383		50154	153.7	1230		FALSE			
RIO BLANCO 9 STATE #001	3002536302	9	23S	34E	B	Lea	NM	4/26/2005 0:00	5.9		83217.6		28207.2	2817	1	493		49511	290.4	1188		FALSE			
MAD DOG 15 FEDERAL COM #001	3002536778	15	23S	34E	P	Lea	NM	4/26/2005 0:00	5.8		81393.3		27656.1	2657	9.5	497		48230	331.8	1340		FALSE			
RIO BLANCA 4 FEDERAL COM #001	3002534515	4	23S	34E	F	Lea	NM	5/23/2005 0:00	5.9		76404.4		25237.5	2495	1087	329		45259	290.4	1093		FALSE			
RIO BLANCO 9 STATE #001	3002536302	9	23S	34E	B	Lea	NM	5/23/2005 0:00	5.9		74771.3		25099.8	2724	5	454		44417	311.1	1123		FALSE			
MAD DOG 15 FEDERAL COM #001	3002536778	15	23S	34E	P	Lea	NM	5/23/2005 0:00	5.8		72187.8		24914.3	2151	7.5	345		42673	331.8	1198		FALSE			
RIO BLANCA 4 FEDERAL COM #001	3002534515	4	23S	34E	F	Lea	NM	6/30/2005 0:00	6.1		74296		25272.2	2538	47	343		44022	456.3	1031	60	FALSE			
RIO BLANCO 9 STATE #001	3002536302	9	23S	34E	B	Lea	NM	6/30/2005 0:00	6		74579		25426.9	2472	33	363		44159	414.8	1112	50	FALSE			
MAD DOG 15 FEDERAL COM #001	3002536778	15	23S	34E	P	Lea	NM	6/30/2005 0:00	6.1		73515.4		25199.7	2394	22	320		43444	456.3	1134	25	FALSE			
MAD DOG 15 FEDERAL COM #001	3002536778	15	23S	34E	P	Lea	NM	4/10/2007 0:00	6.6		73741.5		24583.3	2814	5	363	0.2	42853	732	1724		FALSE			
ANTELOPE RIDGE UNIT #003	3002521082	34	23S	34E	K	LEA	NM	ANTELOPE RIDGE	DEVONIAN	UNKNOWN	11/14/1967 0:00	6.9		80187					47900	476	900		TRUE		
CABALLO 9 STATE #001	3002534577	9	23S	34E	E	Lea	NM				5/14/2014 0:00	6.9		70554		22500.6	2476.8	0	337.7	0	42521	732	1299	200	FALSE
RIO BLANCO 9 STATE #001	3002536302	9	23S	34E	B	Lea	NM				5/14/2014 0:00	6.2		192154		54068.3	13499.7	59.3	1983	2.7	119614	122	943	200	FALSE
BELL LAKE UNIT #009	3002520261	18	23S	34E	K	LEA	NM	BELL LAKE NORTH	BONE SPRING	UNKNOWN				204652					130000	512	260		TRUE		
MAD DOG 15 FEDERAL COM #001	3002536778	15	23S	34E	P	Lea	NM				3/29/2010 0:00	7		77292.8		25964.7	2876	1	378	0.08	45890	244	1186	100	FALSE
MAD DOG 15 FEDERAL COM #001	3002536778	15	23S	34E	P	Lea	NM				8/24/2010 0:00	8.4		69356		24262.3	1833	4.5	298	0.2	40711	366	1404	20	FALSE
CABALLO 9 STATE #001	3002534577	9	23S	34E	E	Lea	NM				10/14/2010 0:00	7		122402.2		38021	6823	11	1120		73600	622.2	1213	300	FALSE
THISTLE UNIT #017H	3002539893	33	23S	33E	O	Lea	NM				42041	6		89832		22107	15	4443		3	189304	73	200	350	FALSE
THISTLE UNIT #018H	3002540010	28	23S	33E	C	Lea	NM				42041	5.7		93485		22643	31	4570		3.2	195932	73	270	390	FALSE
THISTLE UNIT #049H	3002541254	34	23S	33E	N	Lea	NM				42041	6.1		51720		8636	84	1117		0.95	98474	183	690	300	FALSE
THISTLE UNIT #065H	3002541303	33	23S	33E	P	Lea	NM				42077	6.3		80875		6665	79	871		0.65	138579	183	470	300	FALSE
THISTLE UNIT #061H	3002541487	22	23S	33E	M	Lea	NM				42077	6.3		84834		7818	12	927		0.12	146896	146	480	250	FALSE
THISTLE UNIT #004	3002534456	34	23S	33E	N	Lea	NM				37042	5.08		21757.8		315.8	4914	284	368		12856	163	150		FALSE
THISTLE UNIT #005	3002534580	34	23S	33E	F	Lea	NM	37042	6.99		74186		25899	1996	27	253		44527	386	269		FALSE			
THISTLE UNIT #018H	3002540010	28	23S	33E	C	Lea	NM	41892	6		254702.7		70206.8	20688.4	47.7	3452.1	3.83	157600	122	0	200	FALSE			
THISTLE UNIT #032H	3002540016	33	23S	33E	P	Lea	NM	41892	6		256044.9		68990.7	20375.4	30.7	3375.3	3.98	160600	122	0	400	FALSE			
THISTLE UNIT #043H	3002540898	33	23S	33E	M	Lea	NM	41892	6.6		143879.2		46056.9	7296.4	79.8	820.9	2.6	86700	244	0	300	FALSE			
THISTLE UNIT #046H	3002541118	33	23S	33E	N	Lea	NM	41892	6.5		163164.2		52347.9	8192.1	46.1	890.3	1.64	99400	122	0	200	FALSE			
THISTLE UNIT #048H	3002541253	34	23S	33E	N	Lea	NM	41892	6.5		161403.3		51347.4	7892.9	18.5	856.7	1.12	99100	122	0	250	FALSE			
THISTLE UNIT #049H	3002541254	34	23S	33E	N	Lea	NM	41892	6.5		161244.1		50959.5	7851.1	21.9	845.1	1.18	99300	122	0	200	FALSE			
THISTLE UNIT #050H	3002541302	34	23S	33E	P	Lea	NM	41892	6.5		158786.1		51053.6	8121.8	10.6	874.5	1.42	96500	122	0	150	FALSE			
THISTLE UNIT #058H	3002541342	22	23S	33E	O	Lea	NM	41892	6.4		165329.7		52112.8	8757.2	22.5	937.2	1.43	101300	183	0	200	FALSE			
THISTLE UNIT #017H	3002539893	33	23S	33E	O	Lea	NM</																		

Table 3
Produced Water

wellname	api	section	township	range	unit	county	state	field	formation	samplesource	sampldate	ph	specificgravity	tds_mgl	resistivity_ohm_cm	sodium_mgl	calcium_mgl	iron_mgl	magnesium_mgl	manganese_mgl	chloride_mgl	bicarbonate_mgl	sulfate_mgl	co2_mgl	CorrectFlag
THISTLE UNIT #059H	3002541796	28	23S	33E	B	Lea	NM		BONE SPRING 2ND SAND		42138	6.6				59742	11512	106	1633	2.1	117000	220	363	374	FALSE
THISTLE UNIT #043H	3002540898	33	23S	33E	M	Lea	NM		BONE SPRING 2ND SAND		42201	7		155146.4	0.041	51155.5	7420	35.9	868.5	1.25	94478.7	183	600	900	FALSE
THISTLE UNIT #046H	3002541118	33	23S	33E	N	Lea	NM		BONE SPRING 2ND SAND		42201	7		166100.9	0.039	55345.3	7538	8.9	884.9	1.68	101077.2	244	635	500	FALSE
THISTLE UNIT #048H	3002541253	34	23S	33E	N	Lea	NM		BONE SPRING 2ND SAND		42201	6.7		162709.3	0.039	53857.8	7649	29.6	877.2	1.03	98977.7	244	675	300	FALSE
THISTLE UNIT #050H	3002541302	34	23S	33E	P	Lea	NM		BONE SPRING 2ND SAND		42201	6.68		146169.4	0.044	47938.1	7126	53.7	824.4	1.43	88480	488	880	500	FALSE
THISTLE UNIT #065H	3002541303	33	23S	33E	P	Lea	NM		BONE SPRING 2ND SAND		42201	6.73		159590.4	0.04	52593.6	7634	38.6	905.6	1.28	97178.1	183	635	450	FALSE
SEA SNAKE 35 STATE #001H	3002541625	35	23S	33E	M	Lea	NM		BONE SPRING 2ND SAND		42201	7		146173.6	0.044	48514.2	6777	38.9	763.1	1.51	88880	207.4	635	60	FALSE
SEA SNAKE 35 STATE #003H	3002542283	35	23S	33E	O	Lea	NM		BONE SPRING 2ND SAND		42208	7		118969.6	0.054	39811	5202	26.1	612.4	1.05	71983.8	231.8	820	40	FALSE
THISTLE UNIT #018H	3002540010	28	23S	33E	C	Lea	NM		DELAWARE-BRUSHY CANYON		42256	6.5		182009	0.035	56667.9	11090	47.3	1461	2	111474.9	61	600	260	FALSE
THISTLE UNIT #020H	3002540015	27	23S	33E	D	Lea	NM		DELAWARE-BRUSHY CANYON		42256	6.5		167967.8	0.038	53995.6	9118	40.6	1014	1.19	102676.8	73.2	425	200	FALSE
TAIPAN 10 STATE COM #001H	3002540743	15	23S	33E	D	Lea	NM		BONE SPRING 2ND SAND		42256	6.5		183673.6	0.035	59642.2	9492	48.1	1067	1.08	111974.8	61	765	230	FALSE
THISTLE UNIT #056H	3002541340	22	23S	33E	O	Lea	NM				42256	5.43		135196.2	0.047	43673.3	7109	54.7	790.2	1.15	81881.5	500.2	765	600	FALSE
THISTLE UNIT #057H	3002541341	22	23S	33E	O	Lea	NM		BONE SPRING 2ND SAND		42256	7		130630.5	0.049	47917.4	2149	12.9	341.3	0.3	78382.3	561	710	210	FALSE
THISTLE UNIT #058H	3002541342	22	23S	33E	O	Lea	NM		BONE SPRING 2ND SAND		42256	5.63		172311.7	0.037	54411.1	10120	45.1	1126	1.24	105276.3	305	425	550	FALSE
THISTLE UNIT #062H	3002541466	22	23S	33E	O	Lea	NM		BONE SPRING 2ND SAND		42256	7.54		106744.9	0.06	32885.4	5523	0.8	1747	0.1	64285.5	976	1205	600	FALSE
THISTLE UNIT #063H	3002541467	22	23S	33E	O	Lea	NM		BONE SPRING 2ND SAND		42256	5.62		164203.7	0.039	53030.1	8746	37.1	968.7	1.11	100077.4	193	635	670	FALSE
THISTLE UNIT #064H	3002541468	22	23S	33E	O	Lea	NM		BONE SPRING 2ND SAND		42256	5.03		184017	0.035	59935.2	9356	57.2	1065	1.28	111874.8	256.2	940	810	FALSE
THISTLE UNIT #061H	3002541487	22	23S	33E	M	Lea	NM		BONE SPRING 2ND SAND		42256	4.63		236468.1	0.027	65180.9	19100	44.5	4014	3.95	146666.9	75.2	425	640	FALSE
THISTLE UNIT #055H	3002541488	22	23S	33E	M	Lea	NM		BONE SPRING 2ND SAND		42256	5.72		217107.3	0.029	62587.2	15640	25.7	3227	3.22	133869.8	256.2	635	1100	FALSE
THISTLE UNIT #059H	3002541796	28	23S	33E	B	Lea	NM		BONE SPRING 2ND SAND		42256	5.1		140110.6	0.046	47035.8	5996	30.2	763	1.97	84880.9	439.2	740	780	FALSE
THISTLE UNIT #051H	3002541896	28	23S	33E	D	Lea	NM		BONE SPRING 2ND SAND		42256	5.16		101658.2	0.063	34198.8	4245	13.2	578.6	0.37	61286.2	158.6	1030	170	FALSE
THISTLE UNIT #052H	3002541897	28	23S	33E	C	Lea	NM		BONE SPRING 2ND SAND		42256	6.5		161549.2	0.04	51767.5	8900	56.2	1004	1.25	98777.7	73.2	425	250	FALSE
HORNED VIPER 20 FEDERAL COM #001H	3002541913	20	23S	33E	N	Lea	NM		BONE SPRING 2ND SAND		42256	7		130154.4	0.049	49951.8	721	11.4	140	0.1	78282.4	158.6	740	210	FALSE
HORNED VIPER 20 FEDERAL COM #002H	3002541914	20	23S	33E	M	Lea	NM		BONE SPRING 2ND SAND		42256	6.1		272936.3	0.023	76649.8	21050	34.8	4456	4.19	169061.9	40	600	300	FALSE
THISTLE UNIT #071H	3002542425	27	23S	33E	A	Lea	NM		BONE SPRING 1ST SAND		42256	5.6		171476.3	0.037	55363.2	9140	40.4	1023	1.1	104576.4	244	560	770	FALSE
THISTLE UNIT #026H	3002542431	22	23S	33E	M	Lea	NM		DELAWARE-BRUSHY CANYON		42256	5.04		133984.6	0.048	45518.8	5227	38.2	672.7	0.72	80481.9	972.2	880	240	FALSE
MARSHALL #001	3002508358	19	23S	33E	M	LEA	NM	CRUZ	DELAWARE	UNKNOWN				238931							148600	127	156		TRUE
THISTLE UNIT #017H	3002539893	33	23S	33E	O	Lea	NM		DELAWARE-BRUSHY CANYON		40865	7		249357.8		68908.3	19792	108	3609	3.5	153350	61	1010	300	FALSE
THISTLE UNIT #020H	3002540015	27	23S	33E	D	Lea	NM		DELAWARE-BRUSHY CANYON		40865	7		245475		66848	20494	40	3559	4	151089	61	990	300	FALSE

Table 4 - Chemistry of Produced Water from Formations

wellname	api	section	township	range	unit	county	state	field	formation	depth	samplesource	sampledate	ph	specificgravity	specificgravity_temp_F	tds_mgL	resistivity_ohm_cm	resistivity_ohm_cm_temp_F	conductivity	conductivity_temp_F	sodium_mgL	calcium_mgL	magnesium_mgL	chloride_mgL	bicarbonate_mgL	sulfate_mgL
MCKITTRICK FED #1	3001500135	25	22S	25E	G	EDDY	NM		DEVONIAN		DST					16200							8762	290	1175	
MCKITTRICK FED #1	3001500135	25	22S	25E	G	EDDY	NM		DEVONIAN		DST					17510							9389	664	982	
CARNERO PEAK UT #001	3001510053	31	22S	25E	A	EDDY	NM		DEVONIAN		DST					14601							7236	515	1487	
CARNERO PEAK UT #001	3001510053	31	22S	25E	A	EDDY	NM		DEVONIAN		DST					15780							8126	336	1467	
CARNERO PEAK UT #001	3001510053	31	22S	25E	A	EDDY	NM		DEVONIAN		DST					15580							7853	487	1488	
BANDANA POINT UT #001	3001500044	13	23S	23E	O	EDDY	NM	BANDANA POINT	DEVONIAN		DST					15500							8020	500	1190	
TORTOISE ASB COM #001	3001510490	29	23S	24E	G	EDDY	NM		DEVONIAN		DST					17861							7760	490	3100	
TORTOISE ASB COM #001	3001510490	29	23S	24E	G	EDDY	NM		DEVONIAN		DST					15601							7780	476	1600	
REMUDA BASIN UNIT #001	3001503691	24	23S	29E	J	EDDY	NM	REMUDA	DEVONIAN		SWAB					64582							37500	610	1700	
REMUDA BASIN UNIT #001	3001503691	24	23S	29E	J	EDDY	NM	REMUDA	DEVONIAN		SWAB					56922							29000	1740	4980	
BELL LAKE UNIT #006	3002508483	6	23S	34E	O	LEA	NM	BELL LAKE NORTH	DEVONIAN		HEATER TREATER		7			71078							42200	500	1000	
ANTELOPE RIDGE UNIT #003	3002521082	34	23S	34E	K	LEA	NM	ANTELOPE RIDGE	DEVONIAN		UNKNOWN	14/11/1967 0:00	6,9			80187							47900	476	900	
ANTELOPE RIDGE UNIT #003	3002521082	34	23S	34E	K	LEA	NM	ANTELOPE RIDGE	DEVONIAN		UNKNOWN	14/11/1967 0:00	6,9			80187							47900	476	900	
CLINE FEDERAL #001	3002510717	14	23S	37E	K	LEA	NM	CLINE	DEVONIAN		PRODUCTION TEST					118979							71280	462	2593	
E C HILL B FEDERAL #001	3002510945	34	23S	37E	A	LEA	NM	TEAGUE	DEVONIAN		UNKNOWN					112959							67390	288	2765	
E C HILL D FEDERAL #001	3002510947	34	23S	37E	H	LEA	NM	TEAGUE	DEVONIAN		UNKNOWN					35639										
E C HILL D FEDERAL #004	3002510950	34	23S	37E	A	LEA	NM	TEAGUE	DEVONIAN		UNKNOWN					236252							147000	129	781	
HUAPACHE #003	3001500020	22	24S	22E	F	EDDY	NM		DEVONIAN		DST					3110							48	246	2020	
JURNEGAN POINT #001	3001510280	5	24S	25E	M	EDDY	NM	WILDCAT	DEVONIAN		DST	14/12/1964 0:00	7			229706							136964	198	2511	
JURNEGAN POINT #001	3001510280	5	24S	25E	M	EDDY	NM	WILDCAT	DEVONIAN		DST	14/12/1964 0:00	7			203100							121100	175	2220	
WHITE CITY PENN GAS COM UNIT 1 #001	3001500408	29	24S	26E	A	EDDY	NM		DEVONIAN		DST	01/03/1960 0:00	7	1,012	60		0,36	75	25596	64	6072	1002	132	10120	653	1336
STATE B COM #001	3002509716	36	24S	36E	C	LEA	NM	CUSTER	DEVONIAN		UNKNOWN					176234							107400	128	1004	
ELLIOTT H FEDERAL #001	3002512272	31	24S	38E	H	LEA	NM	DOLLARHIDE	DEVONIAN		WELLHEAD					58687										
ELLIOTT H FEDERAL #001	3002512272	31	24S	38E	H	LEA	NM	DOLLARHIDE	DEVONIAN		WELLHEAD					57018										
WEST DOLLARHIDE DEVONIAN UNIT #104	3002512297	32	24S	38E	I	LEA	NM	DOLLARHIDE	DEVONIAN		WELLHEAD					50858							30200	183	980	
WESTATES FEDERAL #004	3002511389	1	25S	37E	E	LEA	NM	JUSTIS NORTH	FUSSELMAN		DST	17/06/1961 0:00	6			80880							46200	340	3050	
WESTATES FEDERAL #004	3002511389	1	25S	37E	E	LEA	NM	JUSTIS NORTH	FUSSELMAN		DST					84900							48600	840	2650	
WESTATES FEDERAL #004	3002511389	1	25S	37E	E	LEA	NM	JUSTIS NORTH	FUSSELMAN		DST					72200							41000	370	2960	
WESTATES FEDERAL #004	3002511389	1	25S	37E	E	LEA	NM	JUSTIS NORTH	FUSSELMAN		DST					80900							46200	340	3050	
WESTATES FEDERAL #004	3002511389	1	25S	37E	E	LEA	NM	JUSTIS NORTH	FUSSELMAN		DST					77600							44000	550	3240	
WESTATES FEDERAL #004	3002511389	1	25S	37E	E	LEA	NM	JUSTIS NORTH	FUSSELMAN		DST					135000							77000	650	5810	
WESTATES FEDERAL #004	3002511389	1	25S	37E	E	LEA	NM	JUSTIS NORTH	FUSSELMAN		DST					114000							65000	280	5110	
WESTATES FEDERAL #004	3002511389	1	25S	37E	E	LEA	NM	JUSTIS NORTH	FUSSELMAN		DST					135000							77000	500	5320	
WESTATES FEDERAL #008	3002511393	1	25S	37E	E	LEA	NM	JUSTIS NORTH	FUSSELMAN		UNKNOWN					91058							51020	376	4783	
WESTATES FEDERAL #008	3002511393	1	25S	37E	E	LEA	NM	JUSTIS NORTH	FUSSELMAN		UNKNOWN					86847							50450	363	2544	
STATE NJ A #001	3002511398	2	25S	37E	A	LEA	NM	JUSTIS NORTH	DEVONIAN		DST					105350							59300	660	4950	
NEW MEXICO BM STATE #002	3002511407	2	25S	37E	I	LEA	NM	JUSTIS NORTH	MONTOYA		UNKNOWN					77770							45500	1800	2400	
HALE STATE #003	3002512581	2	25S	37E	H	LEA	NM	JUSTIS NORTH	MONTOYA		WELLHEAD					64916							37000	813	2500	
SOUTH JUSTIS UNIT #016F	3002511556	13	25S	37E	F	LEA	NM	JUSTIS	FUSSELMAN		UNKNOWN					57675							34030	595	1211	
LEARCY MCBUFFINGTON #008	3002511569	13	25S	37E	N	LEA	NM	203MNTY, 259FSLM	FUSSELMAN	7052		02/01/1900 0:00	7,6	1,037	78	67909			81429	67		2603	684	38887	742	2489
LEARCY MCBUFFINGTON #008	3002511569	13	25S	37E	N	LEA	NM	JUSTIS	MONTOYA		UNKNOWN					67898							38880	742	2489	
A B COATES C FEDERAL #014	3002511736	24	25S	37E	G	LEA	NM	JUSTIS	MONTOYA		UNKNOWN					39261							22840	871	1030	
SOUTH JUSTIS UNIT #023C	3002511760	25	25S	37E	C	LEA	NM	JUSTIS	FUSSELMAN		SEPARATOR					63817							35870	360	3442	
CARLSON A #002	3002511764	25	25S	37E	I	LEA	NM	JUSTIS	FUSSELMAN		DST					208280							124000	510	3400	
STATE Y #009	3002511777	25	25S	37E	A	LEA	NM	JUSTIS	FUSSELMAN		DST	17/03/1961 0:00	7,3			219570							129000	960	4630	
STATE Y #009	3002511777	25	25S	37E	A	LEA	NM	JUSTIS	FUSSELMAN		DST	18/03/1961 0:00	6,8			163430							96000	290	3780	
CARLSON B 25 #004	3002511784	25	25S	37E	P	LEA	NM	JUSTIS	FUSSELMAN		SEPARATOR					184030							112900	68	1806	
COPPER #001	3002511818	28	25S	37E	J	LEA	NM	CROSBY	DEVONIAN		UNKNOWN					27506							15270	1089	1079	
ARNOTT RAMSAY NCT-B #003	3002511863	32	25S	37E	A	LEA	NM	CROSBY	DEVONIAN	8797		02/01/1900 0:00		1,142	70							17244	5345	100382	476	
ARNOTT RAMSAY NCT-B #003	3002511863	32	25S	37E	A	LEA	NM	CROSBY	DEVONIAN		UNKNOWN					158761										
WEST DOLLARHIDE DEVONIAN UNIT #110	3002512386	5	25S	38E	B	LEA	NM	DOLLARHIDE	DEVONIAN		UNKNOWN					56776										
FARNSWORTH FEDERAL #006	3002511950	4	26S	37E	A	LEA	NM	CROSBY	DEVONIAN		UNKNOWN					31931							20450	302	591	

OSE Well Logs – NO CORRECT WATER SUPPLY WELL LOGS

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

R. T. HICKS CONSULTANTS, LTD.

901 Rio Grande Blvd NW ▲ Suite F-142 ▲ Albuquerque, NM 87104 ▲ 505.266.5004 ▲ Since 1996
Artesia ▲ Carlsbad ▲ Durango ▲ Midland

July 22, 2019

Hobbs News Sun
201 N. Thorp
P.O. Box 850
Hobbs, N.M. 88240

LEGAL NOTICE

AWR Disposal LLC, 3300 N. A Street, Ste. 220, Midland, TX 79705 filed Form C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division seeking administrative approval for a salt water disposal well. The proposed well, the Bench State SWD #1 will be located 915 feet from the North line and 669 feet from the West line, Section 14, Township 23 South, Range 33 East, Lea County, New Mexico. Produced water from area production will be commercially disposed into the Silurian, Fusselman and Montoya Formations at a depth of 16,760 feet to 18,498 feet at a maximum surface pressure of 3,000 psi and an average injection rate of 30,000 barrels per day. The proposed SWD well is located approximately 32 miles southwest of Eunice, New Mexico.

Interested parties wishing to object to the proposed application must file with the New Mexico Oil Conservation Division, 1220 S. St. Francis Dr., Santa Fe, NM 87505 (505) 476-3460 within 15 days of the date of this notice.

Additional information can be obtained by contacting Mr. Randall Hicks, agent for Accelerated Water Resources, LP, at 505-238-9515.

Sincerely,
R.T. Hicks Consultants



Randall Hicks
Principal

Affidavit of Publication

STATE OF NEW MEXICO
COUNTY OF LEA

I, Daniel Russell, Publisher of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

Beginning with the issue dated
July 23, 2019
and ending with the issue dated
July 23, 2019.



Publisher

Sworn and subscribed to before me this
23rd day of July 2019.

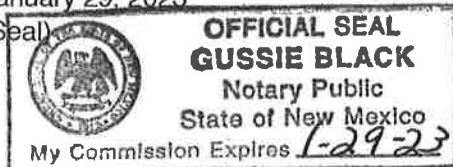


Business Manager

My commission expires

January 29, 2023

(Seal)



This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said

LEGAL NOTICE JULY 23, 2019

AWR Disposal LLC, 3300 N. A Street, Ste. 220, Midland, TX 79705 filed Form C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division seeking administrative approval for a salt water disposal well. The proposed well, the Bench State SWD #1 will be located 915 feet from the North line and 668 feet from the West line, Section 14, Township 23 South, Range 33 East, Lea County, New Mexico. Produced water from area production will be commercially disposed into the Silurian, Fusselman and Montoya Formations at a depth of 16,760 feet to 18,498 feet at a maximum surface pressure of 3,000 psi and an average injection rate of 30,000 barrels per day. The proposed SWD well is located approximately 32 miles southwest of Eunice, New Mexico.

Interested parties wishing to object to the proposed application must file with the New Mexico Oil Conservation Division, 1220 S. St. Francis Dr., Santa Fe, NM 87505 (505) 476-3460 within 15 days of the date of this notice.

Additional information can be obtained by contacting Mr. Randall Hicks, agent for Accelerated Water Resources, LP, at 505-238-9515.

Sincerely,
R.T. Hicks Consultants
Randall Hicks
Principal
#34478

67115764

00231125

RANDALL HICKS
R.T. HICKS CONSULTANTS, LTD
901 RIO GRANDE BLVD NM
SUITE F-142
ALBUQUERQUE, NM 87104

R. T. HICKS CONSULTANTS, LTD.

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Artesia ▲ Carlsbad ▲ Durango ▲ Midland

July 22, 2019

NOTIFICATION TO INTERESTED PARTIES

Via U.S. Certified Mail – Return Receipt Requested

To Whom It May Concern:

AWR Disposal LLC, Midland, Texas, has made application to the New Mexico Oil Conservation Division to drill and complete, for salt water disposal, the Bench State SWD #1. The proposed commercial operation will be for produced water disposal from area operators. As indicated in the notice below, the well is located in Section 14 Township 23 South, Range 33 East, Lea County, New Mexico.

The published notice states that the interval will be from 16,760 feet to 18,498 feet into the Silurian, Fusselman and Montoya Formations.

LEGAL NOTICE

AWR Disposal LLC, 3300 N. A Street, Ste. 220, Midland, TX 79705 filed Form C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division seeking administrative approval for a salt water disposal well. The proposed well, the Bench State SWD #1 will be located 915 feet from the North line and 669 feet from the West line, Section 14, Township 23 South, Range 33 East, Lea County, New Mexico. Produced water from area production will be commercially disposed into the Silurian, Fusselman and Montoya Formations at a depth of 16,760 feet to 18,498 feet at a maximum surface pressure of 3,000 psi and an average injection rate of 30,000 barrels per day. The proposed SWD well is located approximately 32 miles southwest of Eunice, New Mexico.

Interested parties wishing to object to the proposed application must file with the New Mexico Oil Conservation Division, 1220 S. St. Francis Dr., Santa Fe, NM 87505 (505) 476-3460 within 15 days of the date of this notice.

You have been identified as a party who may be interested as an offset lessee or operator. **IF YOU WOULD LIKE AN ELECTRONIC COPY OF THE ENTIRE PERMIT PACKAGE, PLEASE SEND YOUR REQUEST TO r@rthicksconsult.com** (request a read receipt to avoid your email becoming stuck in spam).

Thank you for your attention in this matter.

Sincerely,
R.T. Hicks Consultants



Randall Hicks
Principal

OPERATORS, LEASEHOLDERS AND SURFACE OWNERS WITHIN 2 MILES -RADIUS

DATA EXTRACTED FROM TABLES 1, 2A, 2B AND 2C

Bureau of Land Management Bench SWD #1 620 E. Greene Street Carlsbad, NM 88220-6292	CHEVRON U S A INC Bench SWD #1 6301 DEAUVILLE BLVD MIDLAND, TX 79706	CHEVRON USA INC Bench SWD #1 AS WARREN PETROLEUM COMPANY P O BOX 1589 TULSA, OK 74102 Bad Address
CIMAREX ENERGY CO. Bench SWD #1 600 N. Marienfeld Street Suite 600 Midland, TX 79701	COG OPERATING LLC Bench SWD #1 1048 Paseo De Peralta Santa Fe, NM 87501	CONOCOPHILLIPS COMPANY Bench SWD #1 P. O. BOX 7500 BARTLESVILLE, OK 74005
DEVON ENERGY PRODUCTION CO. Bench SWD #1 333 W. SHERIDAN AVENUE OKLAHOMA CITY, OK 73102	DEVON SFS OPERATING INC Bench SWD #1 20 N. BROADWAY STE 1500 OKLAHOMA CITY, OK 73102	EOG RESOURCES INC Bench SWD #1 P.O. Box 2267 Midland, TX 79702
EOG Y RESOURCES, INC. Bench SWD #1 104 S 4TH ST ARTESIA, NM 88210	HUGHES PROPERTIES LLC Bench SWD #1 PO BOX 5097 CARLSBAD, NM 88221	KAISER-FRANCIS OIL CO Bench SWD #1 6733 S YALE AVE TULSA, OK, OK 74136
LIMESTONE BASIN PROP RANCH LLC Bench SWD #1 18 DESTA DRIVE MIDLAND, TX 79705	MAGNUM HUNTER PRODUCTION, INC. Bench SWD #1 600 N MARIENFELD STREET SUITE 600 MIDLAND, TX 79701	New Mexico State Land Office Bench SWD #1 310 Old Santa Fe Trail Santa Fe, NM 87501
SANTA FE ENERGY OPERATING PRTNRS Bench SWD #1 550 WEST TEXAS SUITE 1330 MIDLAND, TX 79701		

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Bench SWD #1

Street and Apt. No., or PO Box No. 630 E. Greene Street

City, State, ZIP+4® Carlsbad, NM 88220-6292

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Sent To CIMAREX ENERGY CO.

Bench SWD #1

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City, State, ZIP+4® Suite 600

City, State, ZIP+4® Midland, TX 79701

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Bench SWD #1

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Bench SWD #1

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DEVON ENERGY PRODUCTION CO.

Bench SWD #1

333 W. SHERIDAN AVENUE

OKLAHOMA CITY, OK 73102

City, State, ZIP+4®

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DEVON SFS OPERATING INC

Bench SWD #1

20 N. BROADWAY

STE 1500

OKLAHOMA CITY, OK 73102

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EOG RESOURCES INC

Bench SWD #1

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Midland, TX 79702

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EOG Y RESOURCES, INC.

Bench SWD #1

104 S 4TH ST

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HUGHES PROPERTIES INC

Bench SWD #1

PO BOX 5097

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KAISER-FRANCIS OIL CO

Bench SWD #1

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ESTONE BASIN PROP RANCH LLC

Sent To Bench SWD #1

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ANNU HUNTER PRODUCTION, INC.

Sent To Bench SWD #1

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SUITE 600

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New Mexico State Land Office

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Santa Fe, NM 87501

City, State, ZIP+4®

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SAFARI ENERGY OPERATING PARTNERS

Sent To Bench SWD #1

Street and Apt. No., or PO Box No. 550 WEST TEXAS

SUITE 1330

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August 02, 2019

Mr. Phillip Goetze, P.G.
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

RE: AWR Disposal LLC Bench SWD#1
UL D, Section 14 T23S R33E, Lea County

Dear Mr. Goetze:

On behalf of AWR Disposal LLC, R.T. Hicks Consultants is providing data and an opinion regarding the probability that injection of wastewater in the above referenced well at the proposed rates will cause seismic events of sufficient magnitude to create damage. It is our understanding that OCD is interested in such an opinion as part of the SWD approval process. We elected to provide this opinion as a separate submission as the C-108 does not specifically require such an opinion.

We relied upon the following data to develop our opinion

- State of stress in the Permian Basin, Texas and New Mexico: Implications for induced seismicity, Jens-Erik Lund Snee and Mark D. Zoback, The Leading Edge, February 2018¹
- Plate 5, which is reproduced from the Snee and Zoback publication, which uses the following references
 - Crone, A. J., and R. L. Wheeler, 2000, Data for Quaternary faults, liquefaction features, and possible tectonic features in the Central and Eastern United States, east of the Rocky Mountain front; U.S. Geological Survey Open-File Report.
 - Ewing, T. E., R. T. Budnik, J. T. Ames, and D. M. Ridner, 1990, Tectonic map of Texas: Bureau of Economic Geology, University of Texas at Austin.
 - Green, G. N., and G. E. Jones, 1997, e digital geologic map of New Mexico in ARC/INFO format: U.S. Geological Survey Open-File Report.
 - Ruppel, S. C., R. H. Jones, C. L. Breton, and J. A. Kane, 2005, Preparation of maps depicting geothermal gradient and Precambrian structure in the Permian Basin: USGS Order no. 04CRSA0834 and Requisition no. 04CRPR01474.
 - NMOCD database of oil and gas wells
- Plate 5, which shows the distribution of active and new SWD wells in the area of the proposed AWR Disposal SWD well
- Stratigraphic and lithologic information from two deep wells in the Delaware Basin
- Data on the thickness and lithology of the Simpson Group from the Texas Bureau of Economic Geology²

¹ https://scits.stanford.edu/sites/default/files/3702_tss_lundsnee_v2.pdf

² http://www.beg.utexas.edu/resprog/permianbasin/PBGSP_members/writ_synth/Simpson.pdf

Plate 5 reproduces Figure 3 of the 2018 publication of Snee and Zoback and shows

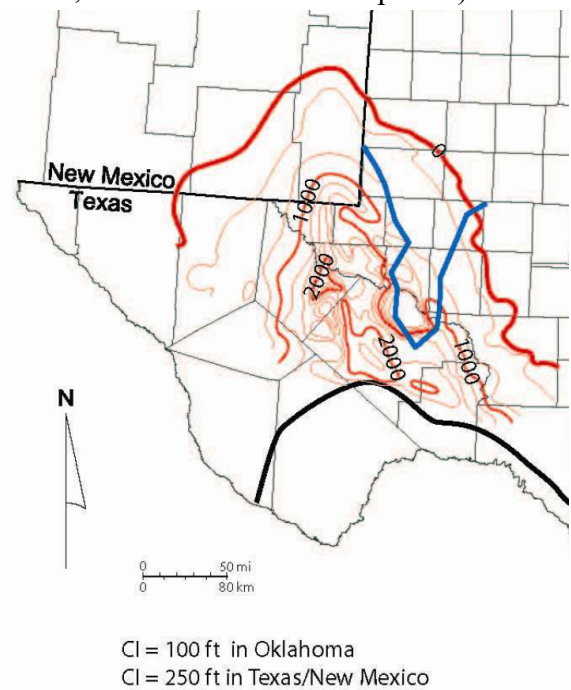
1. Fault traces based upon the references provided above for which Dr. Snee and Dr. Zoback provide a value of the fault slip potential (FSP)
2. Areas of documented seismic activity, and a magnitude 2.0-2.9 earthquake that occurred between 1970-2004 about 11 miles south of the proposed Bench SWD #1. A slightly larger magnitude and more recent seismic event is reported about 20 miles west of the Bench SWD #1 well location.
3. Although Plate 5 does not show faults that may be identified in confidential seismic data owned by oil and gas operators, the closest mapped basement fault that was re-activated during Woodford time is about 1.5 miles to the east) exhibits a low FSP (less than 5%) based upon the modeling and analysis of Snee and Zoback referenced above
4. Other mapped faults in southern Lea County shown on Plate 5 also show a low FSP, except for part of southwest-northeast trending fault about 15 miles north-northeast of the Bench SWD #1 well that has a FSP of about 25 – 33% in the central portion of this fault trace.

Plate 6 reproduces the major elements of Plate 5 in the inset map and also shows that within an 6-mile radius around the proposed Bench SWD #1, the OCD database shows about 2 active and 4 new Devonian SWDs, which translates into an average density of about one SWD for every 18 square miles.

Figure 4 from the referenced Bureau of Economic Geology (The Middle-Upper Ordovician Simpson Group of the Permian Basin: Deposition, Diagenesis, And Reservoir Development) is attached to this letter and the portion of that figure for the Delaware Basin is shown to the right. In southern Lea County the mapped thickness appears to be 500-1500 feet thick (note one contour line appears to be missing on the map). This unit, which is clay-rich carbonate interbedded with shale and sandstone, provides an excellent permeability/pressure barrier between the injection zone and the basement faults that were re-activated during Woodford time.

Data from the Amoco Federal CW Com 1 (3002528119) show that the thickness of the Simpson in the Antelope Ridge area of Lea County (Section 3 24S 34E) is about 450 feet thick with. This is consistent with Figure 4 of the BEG paper (probably because this well was used to produce the isopach map).

We contend that the data permit conclusion that unmapped faults (which may be located by confidential seismic data that AWR Disposal does not possess) near the Bench SWD #1 would be dominantly north-south normal faults, as is common in Lea County. The data on Plate 6



permit a conclusion that faults near the Bench SWD #1 are also most likely to exhibit a low FSP, like the mapped faults shown on Plate 5.

Given the density of Devonian SWDs (planned/new and active) near the proposed Bench SWD #1 well and the high likelihood that any unmapped faults in the area would exhibit a low FSP, the probability that injection into the Bench SWD #1 would cause an increase in pore pressure to trigger a seismic event of sufficient magnitude to cause damage is very low.

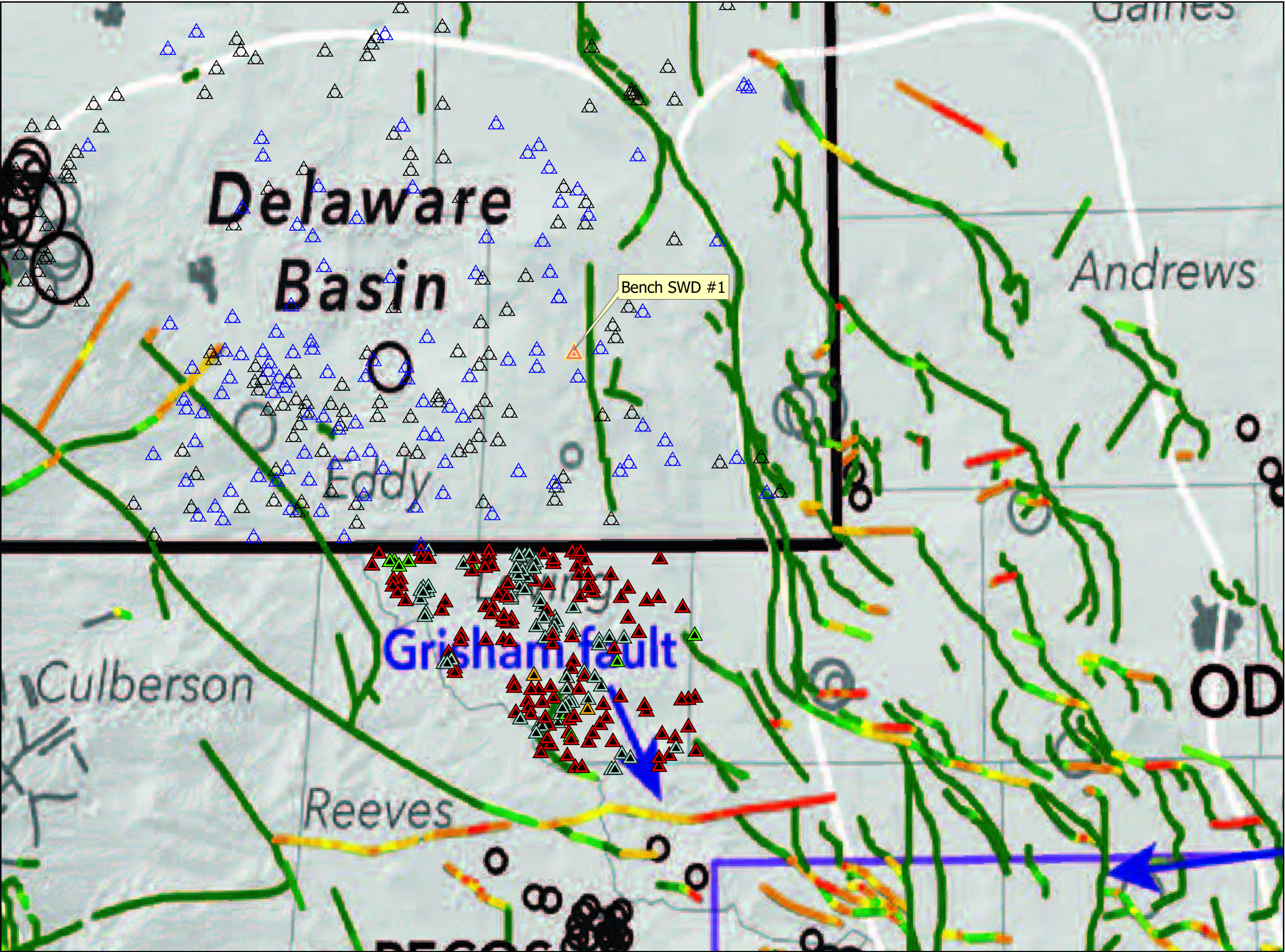
The users of this letter should recognize the uncertainties of using seismic maps of the Permian Basin to determine probability that injection of wastewater into a single SWD well could cause seismic events of sufficient magnitude to cause damage. However, on a regional basis injection by numerous wells into the Devonian/Fusselman/Montoya interval will raise the hydrostatic pressure. If pressure increases sufficiently, fluid could migrate from the injection zone along fault planes, up and down. Downward fluid migration will be intercepted first by the sandstone units of the Simpson Group. After fluid pressure increases in these sandstones, fluid would migrate downward into the Ellenberger Formation, which lies beneath the Simpson Group. This downward migration will next enter the permeable units of the Ellenberger and, over time, increase the fluid pressure. After fluid pressure in the Ellenberger is sufficiently large to cause downward migration along fault planes or other conduits, the migrating fluid will, in some areas, enter a thinner horizon of granite wash. Downward migrating fluids from the injection zone could then enter basement fault planes if the pressure in the granite wash horizon is sufficient, and reduce the frictional resistance (lubricate the faults). Reduction in the frictional force in faults due to fluid invasion can and has caused seismic events. In my opinion, the probability that injection into the Bench SWD will measurably contribute to the events described above and will cause a seismic event resulting in damage is so low as to be nil.

Sincerely,
R.T. Hicks Consultants

A handwritten signature in black ink, appearing to read "Randall T. Hicks". The signature is stylized with a large, looped "R" and a cursive "Hicks".

Randall T. Hicks
Principal

Copy: AWR Disposal LLC



- ▲ SWD
- Oil and Gas (NMOCD)
- △ Salt Water Injection, Active
- △ Salt Water Injection, New
- Loving, Tx Oil and Gas Wells
- ▲ Injection/Disposal From Gas
- ▲ Injection/Disposal From Oil
- ▲ Injection/Disposal From Oil/Gas
- ▲ Injection/Disposal Well

Seismicity:

○ M_w 2.0-2.9 ○ Since 2005

○ M_w 3.0-3.9 ○ 1970-2004

○ M_w 4.0+

Fault slip potential (%):

0 10 20 30 40 50+

Seismic and Fault Slip Potential-
Ewing et al. (1990), Green and Jones (1997), Ruppel
et al. (2005), and the USGS Quaternary Faults and
Folds Database (Crone and Wheeler, 2000).



0 5 10
Miles

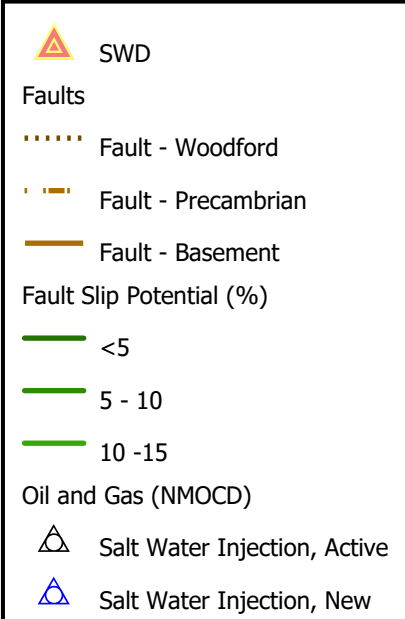
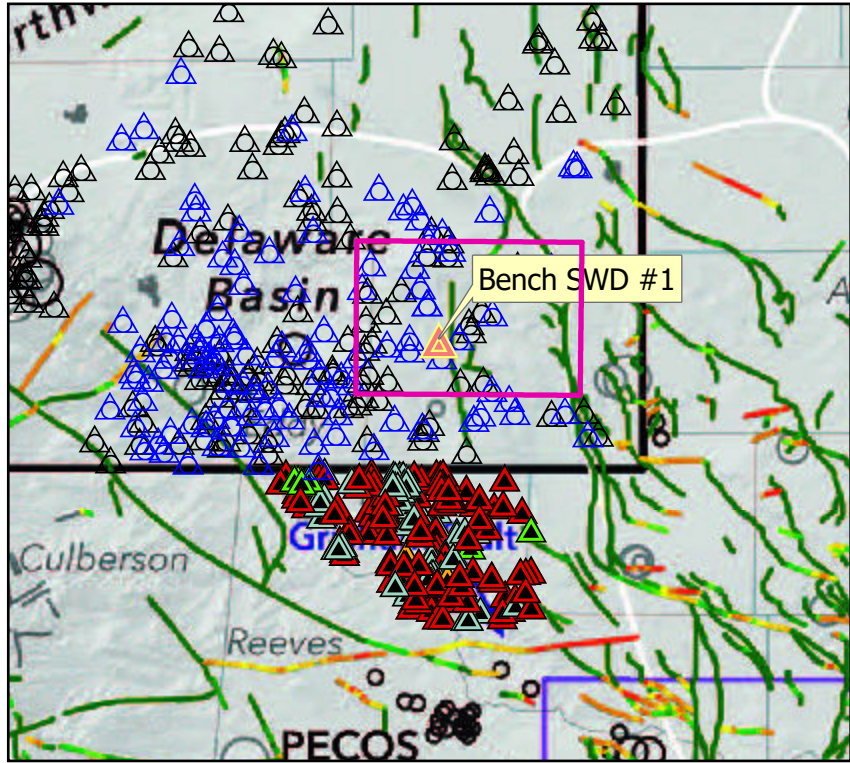
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901 Rio Grande Blvd NW Suite F-142
Albuquerque, NM 87104
Ph: 505.266.5004

Fault Slip Potential and Seismicity

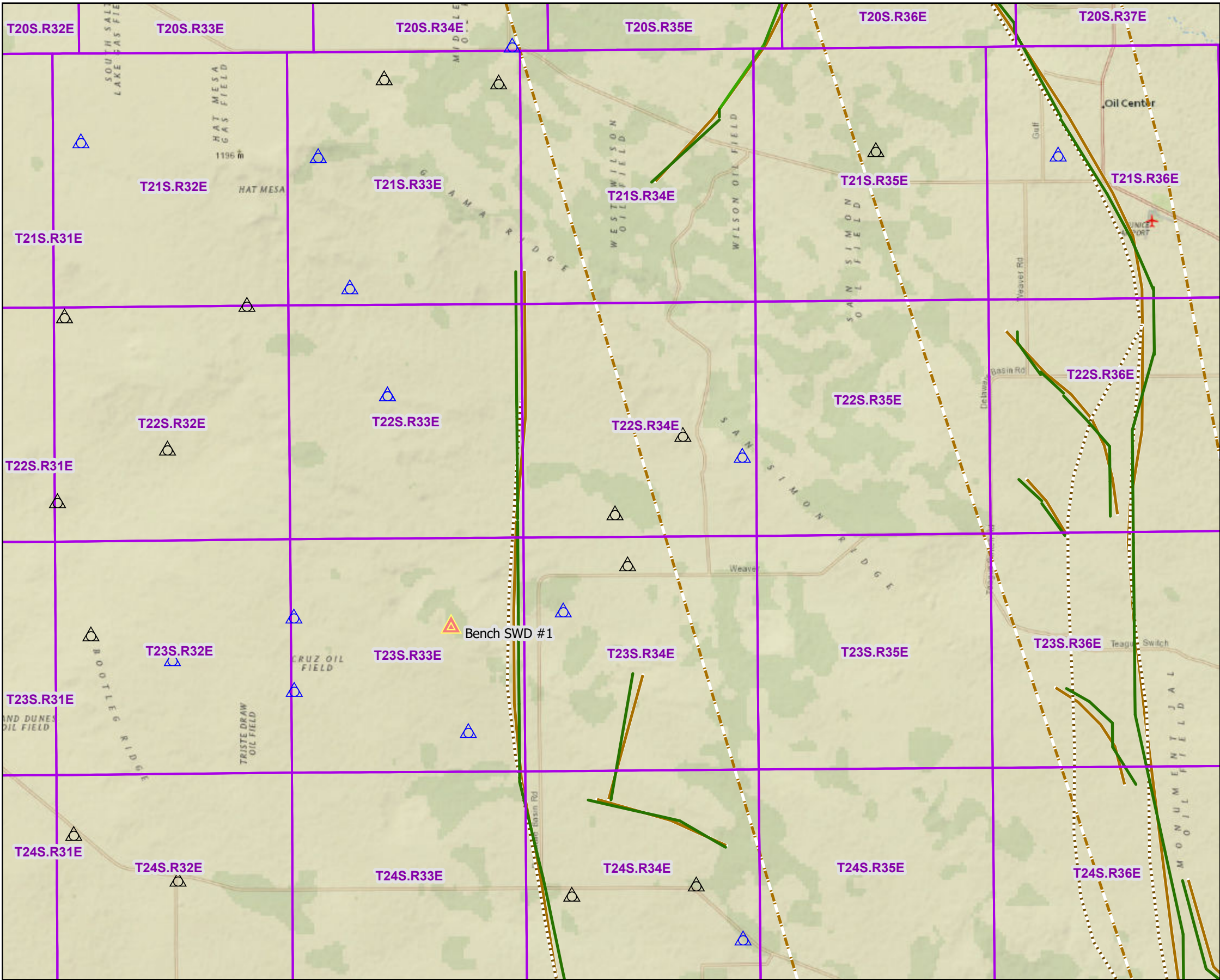
AWR Disposal, LLC
Bench SWD #1

Plate 5

July 2019



Seismic and Fault Slip Potential-
Ewing et al. (1990), Green and Jones (1997), Ruppel
et al. (2005), and the USGS Quaternary Faults and
Folds Database (Crone and Wheeler, 2000).



0 3 6 Miles

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Fault Slip Potential

AWR Disposal, LLC
Bench SWD #1

Plate 6

July 2019