

**Table 1-1 - Revision 0
Burial Area #1
Final Status Survey Soil Data**

Preparer: J. Lux; Date 8/25/21
Reviewer: E. Dulle; Date: 10/8/22

Sample ID	Net Total Uranium
	(pCi/g)
FA-0001	2
FA-0002	4
FA-0003	8
FA-0004	4
FA-0005	3
FA-0006	2
FA-0007	5
FA-0008	5
FA-0009	5
FA-0010	4
FA-0011	5
FA-0012	4
FA-0013	6
FA-0014	2
FA-0015	5
FA-0016	1
FA-0017	1
FA-0018	5
FA-0019	2
FA-0020	4
FA-0021	2
FA-0022	6
FA-0023	5
FA-0024	7
FA-0025	4
FA-0026	2
FA-0027	3
FA-0028	2
FA-0029	2
FA-0030	2
FA-0031	6

Sample ID	Net Total Uranium
	(pCi/g)
FA-0032	6
FA-0033	3
FA-0034	3
FA-0035	4
FA-0036	2
FA-0037	4
FA-0038	3
FA-0039	9
FA-0040	4
FA-0041	4
FA-0042	3
FA-0043	4
FA-0044	1
FA-0045	3
FA-0046	4
FA-0047	3
FA-0048	2
FA-0049	4
FA-0050	4
FA-0051	6
FA-0052	6
FA-0053	6
FA-0054	2
FA-0055	2
FA-0056	5
FA-0057	1
FA-0058	4
FA-0059	5
FA-0060	3
FA-0061	2
FA-0062	2

Sample ID	Net Total Uranium
	(pCi/g)
FA-0063	0
FA-0064	0
FA-0065	4
FA-0066	3
FA-0067	5
FA-0068	1
FA-0069	6
FA-0070	4
FA-0071	3
FA-0072	2
FA-0073	4
FA-0074	3
FA-0075	4
FA-0076	3
FA-0077	1
FA-0078	2
FA-0079	2
FA-0080	3
FA-0081	1
FA-0082	3
FA-0083	4
FA-0084	0
FA-0085	0
FA-0086	5
FA-0087	6
FA-0088	0
FA-0089	1
FA-0090	1
FA-0091	1
FA-0092	4
FA-0093	4

Sample ID	Net Total Uranium
	(pCi/g)
FA-0094	2
FA-0095	4
FA-0096	1
FA-0097	1
FA-0098	6
FA-0099	4
FA-0100	3
FA-0101	1
FA-0102	4
FA-0103	5
FA-0104	3
FA-0105	2
FA-0106	5
FA-0107	0
FA-0108	3
FA-0109	6
FA-0110	4
FA-0111	0
FA-0112	5
FA-0113	5
FA-0114	5
FA-0115	0
FA-0116	4
FA-0117	2
FA-0118	0
FA-0119	6
FA-0120	2
FA-0121	3
FA-0122	3
FA-0123	7
FA-0124	1

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Reviewer: E. Dulle; Date: 10/8/22

Sample ID	Net Total Uranium
	(pCi/g)
FA-0125	1
FA-0126	2
FA-0127	4
FA-0128	3
FA-0129	8
FA-0130	3
FA-0131	5
FA-0132	2
FA-0133	3
FA-0134	3
FA-0135	2
FA-0136	2
FA-0137	6
FA-0138	4
FA-0139	1
FA-0140	3
FA-0141	5
FA-0142	3
FA-0143	9
FA-0144	6
FA-0145	6
FA-0146	7
FA-0147	4
FA-0148	0
FA-0149	3
FA-0150	6
FA-0151	5
FA-0152	2
FA-0153	4
FA-0154	2
FA-0155	0

Sample ID	Net Total Uranium
	(pCi/g)
FA-0156	2
FA-0157	2
FA-0158	4
FA-0159	4
FA-0160	5
FA-0161	2
FA-0162	3
FA-0163	8
FA-0164	4
FA-0165	5
FA-0166	4
FA-0167	3
FA-0168	3
FA-0169	1
FA-0170	4
FA-0171	7
FA-0172	6
FA-0173	4
FA-0174	5
FA-0175	3
FA-0176	3
FA-0177	4
FA-0178	1
FA-0179	3
FA-0180	5
FA-0181	9
FA-0182	7
FA-0183	5
FA-0184	2
FA-0185	4
FA-0186	3

Sample ID	Net Total Uranium
	(pCi/g)
FA-0187	6
FA-0188	4
FA-0189	0
FA-0190	3
FA-0191	9
FA-0192	6
FA-0193	7
FA-0194	8
FA-0195	1
FA-0196	4
FA-0197	6
FA-0198	5
FA-0199	4
FA-0200	2
FA-0201	6
FA-0202	4
FA-0203	8
FA-0204	8
FA-0205	6
FA-0206	1
FA-0207	4
FA-0208	2
FA-0209	6
FA-0210	1
FA-0211	6
FA-0212	2
FA-0213	4
FA-0214	3
FA-0215	8
FA-0216	5
FA-0217	6

Sample ID	Net Total Uranium
	(pCi/g)
FA-0218	7
FA-0219	2
FA-0220	6
FA-0221	2
FA-0222	1
FA-0223	0
FA-0224	3
FA-0225	2
FA-0226	5
FA-0227	2
FA-0228	3
FA-0229	4
FA-0230	6
FA-0231	6
FA-0232	5
FA-0233	2
FA-0234	3
FA-0235	2
FA-0236	9
FA-0237	2
FA-0238	4
FA-0239	5
FA-0240	8
FA-0241	1
FA-0242	4
FA-0243	5
FA-0244	1
FA-0245	5
FA-0246	7
FA-0247	4
FA-0248	7

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Preparer: J. Lux; Date 8/25/21
Reviewer: E. Dulle; Date: 10/8/22

Sample ID	Net Total Uranium
	(pCi/g)
FA-0249	2
FA-0250	5
FA-0251	5
FA-0252	6
FA-0253	3
FA-0254	7
FA-0255	3
FA-0256	2
FA-0257	0
FA-0258	2
FA-0259	4
FA-0260	2
FA-0261	2
FA-0262	3
FA-0263	2
FA-0264	4
FA-0265	3
FA-0266	6
FA-0267	4
FA-0268	2
FA-0269	2
FA-0270	4
FA-0271	6
FA-0272	1
FA-0273	5
FA-0274	8
FA-0275	7
FA-0276	2
FA-0277	2
FA-0278	4
FA-0279	3

Sample ID	Net Total Uranium
	(pCi/g)
FA-0280	1
FA-0281	1
FA-0282	8
FA-0283	5
FA-0284	1
FA-0285	1
FA-0286	1
FA-0287	5
FA-0288	0
FA-0289	2
FA-0290	3
FA-0291	6
FA-0292	4
FA-0293	3
FA-0294	2
FA-0295	1
FA-0296	4
FA-0297	3
FA-0298	1
FA-0299	3
FA-0300	0
FA-0301	7
FA-0302	3
FA-0303	4
FA-0304	0
FA-0305	2
FA-0306	3
FA-0307	4
FA-0308	3
FA-0309	5
FA-0310	3

Sample ID	Net Total Uranium
	(pCi/g)
FA-0311	2
FA-0312	3
FA-0313	4
FA-0314	6
FA-0315	4
FA-0316	1
FA-0317	3
FA-0318	2
FA-0319	8
FA-0320	1
FA-0321	4
FA-0322	3
FA-0323	5
FA-0324	4
FA-0325	3
FA-0326	4
FA-0327	5
FA-0328	6
FA-0329	4
FA-0330	3
FA-0331	0
FA-0332	3
FA-0333	3
FA-0334	3
FA-0335	1
FA-0336	5
FA-0337	0
FA-0338	4
FA-0339	3
FA-0340	6
FA-0341	2

Sample ID	Net Total Uranium
	(pCi/g)
FA-0342	3
FA-0343	3
FA-0344	1
FA-0345	0
FA-0346	0
FA-0347	0
FA-0348	1
FA-0349	3
FA-0350	1
FA-0351	6
FA-0352	2
FA-0353	5
FA-0354	2
FA-0355	2
FA-0356	6
FA-0357	3
FA-0358	3
FA-0359	0
FA-0360	3
FA-0361	1
FA-0362	2
FA-0363	0
FA-0364	2
FA-0365	5
FA-0366	3
FA-0367	0
FA-0368	0
FA-0369	6
FA-0370	3
FA-0371	6
FA-0372	3

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Burial Area #1
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Reviewer: E. Dulle; Date: 10/8/22

Sample ID	Net Total Uranium (pCi/g)
FA-0373	2
FA-0374	2
FA-0375	1
FA-0376	1
FA-0377	-3
FA-0378	5
FA-0379	2
FA-0380	6
FA-0381	2
FA-0382	6
FA-0383	10
FA-0384	7
FA-0385	1
FA-0386	3
FA-0387	5
FA-0388	0
FA-0389	0
FA-0390	1
FA-0391	3
FA-0392	3
FA-0393	5
FA-0394	4
FA-0395	2
FA-0396	7
FA-0397	9
FA-0398	5
FA-0399	1
FA-0400	8
FA-0401	4
FA-0402	0
FA-0403	-1

Sample ID	Net Total Uranium (pCi/g)
FA-0404	5
FA-0405	1
FA-0406	1
FA-0407	5
FA-0408	3
FA-0409	2
FA-0410	7
FA-0411	7
FA-0412	4
FA-0413	1
FA-0414	0
FA-0415	1
FA-0416	1
FA-0417	2
FA-0418	0
FA-0419	1
FA-0420	3
FA-0421	1
FA-0422	3
FA-0423	3
FA-0424	7
FA-0425	2
FA-0426	1
FA-0427	0
FA-0428	3
FA-0429	2
FA-0430	2
FA-0431	2
FA-0432	1
FA-0433	1
FA-0434	8

Sample ID	Net Total Uranium (pCi/g)
FA-0435	6
FA-0436	6
FA-0437	4
FA-0438	4
FA-0439	4
FA-0440	2
FA-0441	1
FA-0442	3
FA-0443	3
FA-0444	3
FA-0445	3
FA-0446	5
FA-0447	2
FA-0448	6
FA-0449	6
FA-0450	2
FA-0451	1
FA-0452	9
FA-0453	3
FA-0454	5
FA-0455	6
FA-0456	2
FA-0457	2
FA-0458	0
FA-0459	1
FA-0460	4
FA-0461	2
FA-0462	3
FA-0463	5
FA-0464	3
FA-0465	4

Sample ID	Net Total Uranium (pCi/g)
FA-0466	5
FA-0467	5
FA-0468	3
FA-0469	7
FA-0470	6
FA-0471	9
FA-0472	2
FA-0473	2
FA-0474	1
FA-0475	5
FA-0476	14
FA-0477	2
FA-0478	5
FA-0479	2
FA-0480	3
FA-0481	1
FA-0482	4
FA-0483	2
FA-0484	3
FA-0485	4
FA-0486	4
FA-0487	3
FA-0488	6
FA-0489	2
FA-0490	4
FA-0491	5
FA-0492	6
FA-0493	7
FA-0494	4
FA-0495	7
FA-0496	3

**Table 1-1 - Revision 0
Burial Area #1
Final Status Survey Soil Data**

Preparer: J. Lux; Date 8/25/21
Reviewer: E. Dulle; Date: 10/8/22

Sample ID	Net Total Uranium (pCi/g)
FA-0497	3
FA-0498	4
FA-0499	3
FA-0500	2
FA-0501	1
FA-0502	-1
FA-0503	4
FA-0504	4
FA-0505	0
FA-0506	1
FA-0507	3
FA-0508	3
FA-0509	3
FA-0510	3
FA-0511	0
FA-0512	3
FA-0513	3
FA-0514	4
FA-0515	4
FA-0516	5
FA-0517	6
FA-0518	2
FA-0519	7
FA-0520	4
FA-0521	1
FA-0522	2

Sample ID	Net Total Uranium (pCi/g)
FA-0523	5
FA-0524	2
FA-0525	3
FA-0526	3
FA-0527	3
FA-0528	1
FA-0529	9
FA-0530	2
FA-0531	1
FA-0532	0
FA-0533	8
FA-0535	2
FA-0536	4
FA-0537	5
FA-0538	4
FA-0539	-1
FA-0540	5
FA-0541	6
FA-0542	0
FA-0543	0
FA-0544	-3
FA-0545	1
FA-0546	2
FA-0547	3
FA-0548	3

Sample ID	Net Total Uranium (pCi/g)

Sample ID	Net Total Uranium (pCi/g)

Average Net Uranium Concentration (pCi/g)
3.4

Maximum Net Uranium Concentration (pCi/g)
14.0

Notes:

Source of data is Table 1 from
Final Status Survey Report, Sub-Area F (Nextep Environmental, Inc., 2005).
Accession Number ML20043F208

Table 1 in *Final Status Survey Report, Sub-Area F* did not include data for sample location FA-0534.

pCi/g = picoCuries per gram

**Table 1-2 - Revision 0
Burial Area #2
1996 Final Status Survey Soil Data**

Prepared by: J. Lux; Date: 8/26/21
Reviewed by: E. Dulle; Date: 09/09/22

Easting (meters based on site grid)	Northing (meters based on site grid)	Total Uranium (pCi/g) at Depth Interval					
		0 - 6"	6" - 1'	1' - 2'	2' - 3'	3' - 4'	4' - 5'
60	255	18					
60	260	18					
60	265	12					
60	270	8	14	14	8	5.5	13.5
60	275	17					
60	280	12					
60	285	12					
60	290	8					
60	295	16					
60	300	17					
60	305	13					
60	310	24					
60	315	12					
60	320	19					
65	255	4					
65	260	7					
65	265	7					
65	270	7					
65	275	8					
65	280	4					
65	285	26					
65	290	7	8	8			
65	295	10					
65	300	23					
65	305	13					
65	310	10					
65	315	10					
65	320	10					
70	255	10					
70	260	8					
70	265	6					
70	270	2					
70	275	10					
70	280	7					
70	285	5					

Table 1-2 - Revision 0
Burial Area #2
1996 Final Status Survey Soil Data

Prepared by: J. Lux; Date: 8/26/21
 Reviewed by: E. Dulle; Date: 09/09/22

Easting (meters based on site grid)	Northing (meters based on site grid)	Total Uranium (pCi/g) at Depth Interval					
		0 - 6"	6" - 1'	1' - 2'	2' - 3'	3' - 4'	4' - 5'
70	290	22					
70	295	21					
70	300	47					
70	305	27					
70	310	18					
70	315	56					
70	320	20					
75	255	14					
75	260	8					
75	265	6					
75	270	4					
75	275	7					
75	280	6					
75	285	11					
75	290	10	7	7	7	5	
75	295	14					
75	300	33					
75	305	26					
75	310	4					
75	315	7					
75	320	6					
80	255	16					
80	260	17					
80	265	16					
80	270	10					
80	275	12					
80	280	24					
80	285	20					
80	290	13					
80	295	14					
80	300	7					
80	305	12	10	14	10	11	
80	310	16					
80	315	4					
80	320	8					

**Table 1-2 - Revision 0
Burial Area #2
1996 Final Status Survey Soil Data**

Prepared by: J. Lux; Date: 8/26/21
Reviewed by: E. Dulle; Date: 09/09/22

Easting (meters based on site grid)	Northing (meters based on site grid)	Total Uranium (pCi/g) at Depth Interval					
		0 - 6"	6" - 1'	1' - 2'	2' - 3'	3' - 4'	4' - 5'
85	255	9					
85	260	7					
85	265	9					
85	270	5					
85	275	6					
85	280	9					
85	285	14					
85	290	7					
85	295	11					
85	300	11					
85	305	5					
85	310	7					
85	315	10					
85	320	23					
90	255	4					
90	260	9					
90	265	6					
90	270	10					
90	275	100					
90	280	6					
90	285	8					
90	290	21					
90	295	13					
90	300	9					
90	305	8	7	4	3	4	6
90	310	20					
90	315	10					
90	320	9					

Notes:

- pCi/g = picoCuries per gram (data is total uranium, including background)
- Source of Data is Appendix 2 from *Final Status Survey Report for Sub-Area L (Subsurface)*
- (Cimarron Corporation, 1996)
- Accession Numbers ML20202A535, ML20202A557, and ML20202A558
- Number of Samples = 118
- Average Uranium Concentration = 12.6 pCi/g
- With 4.0 pCi/g background subtracted, Net Mean Uranium Concentration = 8.6 pCi/g

Table 1-3 - Revision 0
Burial Area #3
Final Status Survey Soil Data

Prepared by: J. Lux; Date: 8/25/21
Reviewed by: E. Dulle ; Date: 09/09/22

Easting (meters based on site grid)	Northing (meters based on site grid)	Total Uranium (pCi/g) at Depth Interval						
		0 - 6"	6" - 1'	1' - 2'	2' - 3'	3' -4'	4' - 5'	5' - 6'
310	295	8	7	6	7	9	7	11
310	290	9	4	8	5	5	4	7
310	285	12	6	7	12	5	4	
310	280	7	27	7	7	8	7	7
310	275	6	8	6	9	7	7	4
310	270	6	7	11	7	6	7	3
310	265	7	8	6	8	6	17	12
310	260	9	5	6	5	8	7	4
310	255	6	9	7	9	8		
310	250	6	6	8	3	9	5	
310	245	9	6	4	6	5	6	
310	240	4	7	10	6	5		
310	235	11	9	12	5			
315	295	7	7	9	7	4	6	6
315	290	8	4	7	6	7	5	5
315	285	6	5	9	21	11		
315	280	11	13	12	7	8	6	9
315	275	7	6	12	14	10	10	11
315	270	10	8	14	9	12	7	
315	265	13	35	11	7	7	10	7
315	260	8	8	10	12	5	12	11
315	255	7	10	10	9	11	11	8
315	250	15	18	19	6	10	7	
315	245	16	12	6	6	6	5	
315	240	37	38	18	11	8		
315	235	18	10	27	15	9		
320	295	5	6	7	10	6	5	5
320	290	9	7	7	10	8	7	5
320	285	10	10	8	7	5	6	13
320	280	11	10	7	8	8	7	6
320	275	8	8	15	11	5	8	8
320	270	6	6	16	11	7	5	5
320	265	9	5	47	9	13	11	8
320	260	13	7	9	6	15	14	11
320	255	8	21	15	9	4	8	12
320	250	9	9	10	14	7	11	
320	245	13	8	5	7	6		
320	240	5	10	11	10	10	8	6
320	235	8	7	7	7	7		
325	295	6	11	6	8	8	9	8
325	290	7	7	4	5	6	5	
325	285	5	6	6	6	9	7	6

**Table 1-3 - Revision 0
Burial Area #3
Final Status Survey Soil Data**

Prepared by: J. Lux; Date: 8/25/21
Reviewed by: E. Dulle ; Date: 09/09/22

Easting (meters based on site grid)	Northing (meters based on site grid)	Total Uranium (pCi/g) at Depth Interval						
		0 - 6"	6" - 1'	1' - 2'	2' - 3'	3' -4'	4' - 5'	5' - 6'
325	280	9	11	8	8	7	4	
325	275	8	7	7	6	7	5	7
325	270	8	4	5	6	4	9	7
325	265	10	15	17	11	21	14	15
325	260	10	6	7	10	11	12	7
325	255	13	7	9	10	8	8	10
325	250	8	8	7	14	7	13	7
325	245	14	10	11	7	7	8	10
325	240	7	6	8	6	11	6	7
325	235	5	5	5	7	5	6	
330	295	6	8	13	9	5	8	9
330	290	5	5	7	5	4	7	5
330	285	10	8	7	9	6	6	
330	280	6	4	9	5	4	6	
330	275	9	8	9	9	7	7	
330	270	12	8	15	12	7	7	
330	265	16	20	9	17	12	7	11
330	260	13	14	9	12	11	5	12
330	255	10	10	9	39	29	14	16
330	250	6	16	15	5	8	8	12
330	245	18	20	27	24	26	14	
330	240	26	21	11	6	17	8	8
330	235	10	7	8	4	7	8	
335	295	16	4	10	7	5	5	7
335	290	12	7	7	6	8	4	
335	285	5	5	8	7	6	4	
335	280	7	10	7	6	5	6	
335	275	6	7	8	6	8	5	
335	270	34	21	24	15	14	24	10
335	265	12	22	11	19	10	14	
335	260	14	25	33	26	22	13	10
335	255	9	11	8	17	15	10	10
335	250	12	5	13	11	16	8	
335	245	6	4	8	6	8	6	10
335	240	8	7	9	5	10	5	
335	235	6	7	5	7	4	7	
Average Uranium Concentration		10	10	11	9	9	8	8
Average BA#3 Uranium Concentration		9.4						

Notes:

- Source of Data is Appendix 2 from *Final Status Survey Report, Sub-Area M*
- (Cimarron Corporation, 1998) Accession Number ML19154A192
- Number of Samples = 505
- With 4.0 pCi/g background subtracted, Net Mean Uranium Concentration = 5.4 pCi/g

Table 2-1 - Revision 0
Domestic Water Wells Near the Cimarron Site
(As of February 2021)

Preparer: D. Home; Date: 02/15/21
 Reviewer: E. Dulle; Date: 09/09/22

Well ID	Township	Range	Sect.	10-acre	Latitude	Longitude	Owner
151668	16N	3	6	SW-NW-NW	35.8966	-97.56652	C Porter
9908	16N	3	7	SW-SW-NW	35.879282	-97.566526	Not Avail.
9909	16N	3	7	SE-SW-NE	35.879282	-97.555374	B. Williams
31196	16N	3	7	NE-NE-NW	35.884704	-97.559835	Wayne Mongotmery
36001	16N	3	7	SE-SE-NE	35.879282	-97.550914	VAN FREE
90185	16N	3	7	SW-SW-SW	35.872054	-97.566525	Lancaster
109628	16N	3	7	NE-SE-NE	35.881089	-97.550914	MARLA PEEK
109629	16N	3	7	NE-SE-NE	35.881089	-97.550914	MARLA PEEK
180261	16N	3	7	SE-NW-NE	35.88261	-97.55473	Paul Bartholomew
9910	16N	3	8	NE-NW-NE	35.884704	-97.537427	Mr. & Mrs. Fabuion
9911	16N	3	8	SW-NE-NE	35.882897	-97.535197	Tom Stults
61569	16N	3	8	NW-NE-NE	35.884704	-97.535197	Steve Sheffield
138552	16N	3	8	NE-NE-NE	35.885083	-97.533867	ROY NELSON
79203	16N	3	17	SW-NE-NW	35.868357	-97.544238	Marvin Quinn
90910	16N	3	17	SW-NE-NW	35.868357	-97.544238	Robert Hood
96351	16N	3	17	NE-SE-NE	35.867	-97.533367	Brent Moroney
113999	16N	3	17	SW-SE-SE	35.857833	-97.535667	Don Tharp
124188	16N	3	17	SE-NE-SE	35.860733	-97.532717	Richardson Homes
174735	16N	3	17	SE-SE-SE	35.8577	-97.53419	Kirk Keller
9915	16N	3	18	SE-SW-SE	35.857519	-97.555373	Duffy Martin
9916	16N	3	18	SE-SE-NE	35.864748	-97.550913	Bill Ellis
32572	16N	3	18	NW-SE-SW	35.859326	-97.562063	R C Vannostrand
38607	16N	3	18	SW-NW-NW	35.868362	-97.566523	BRIAN SUMEARLL WELL #19
197831	16N	3	18	SE-SE-SE	35.85842	-97.55166	Greg Ireton
36002	16N	3	19	SE-SE-NE	35.850308	-97.550917	CHAD CHERRY
127541	16N	3	19	SE-NW-NE	35.8544	-97.55555	conrad
134152	16N	3	19	NE-SE-NE	35.852517	-97.551017	michelle

Table 2-1 - Revision 0
Domestic Water Wells Near the Cimarron Site
(As of February 2021)

Preparer: D. Home; Date: 02/15/21
 Reviewer: E. Dulle; Date: 09/09/22

Well ID	Township	Range	Sect.	10-acre	Latitude	Longitude	Owner
23135	16N	4	1	NE-NE-NW	35.898858	-97.57722	Jerry Babb
31202	16N	4	1	NW-NW-NE	35.898858	-97.57499	Jim Crowley
89969	16N	4	1	SW-SW-NE	35.894053	-97.57499	Not Available
38802	16N	4	2	NW-NW-SW	35.892173	-97.601725	CIMARRON APPALOOSA
100123	16N	4	2	SE-SE-SW	35.8875	-97.594	Wayn Tompson
110569	16N	4	2	NE-SE-SW	35.8879	-97.594167	Ed Lehr
129268	16N	4	2	NW-SW-SE	35.8878	-97.59354	Trace OIL
180879	16N	4	2	NW-NW-SW	35.89285	-97.60211	chris wheeler
146005	16N	4	2	NW-SW-SE	35.88859	-97.59377	Brent Gregory
141974	16N	4	2	NW-SE-SE	35.88935	-97.58829	Summit Ranch
144812	16N	4	2	NW-SW-NE	35.89632	-97.5927	Rick Klein
44811	16N	4	3	NW-NE-SE	35.892164	-97.606289	Veldon Zollinger Inc.
90924	16N	4	3	SE-NE-SE	35.890357	-97.604059	Thad Kinney
108469	16N	4	3	SE-NE-SE	35.89	-97.603	Jerry A Payne
176245	16N	4	3	NW-SE-SE	35.88861	-97.60667	2nd Hand Stare
76641	16N	4	12	SW-SW-SW	35.872182	-97.583914	Cimarron Corp/Kerr McGee Corp
87548	16N	4	12	SW-SW-SW	35.872182	-97.583914	Cimarron Corp/Kerr McGee Corp
150878	16N	4	12	SW-SE-SE	35.8722	-97.57151	Kenny Wood
197582	16N	4	12	NE-SE-SE	35.87391	-97.56771	Terry Swinford
143552	16N	4	13	NE-NW-SW	35.86331	-97.58282	Efrain Huerta
9928	16N	4	14	SE-SW-SW	35.857697	-97.599501	Ben Ellis
83070	16N	4	24	NE-SW-SW	35.845014	-97.581737	Mark Dees

Table 2-1 - Revision 0
Domestic Water Wells Near the Cimarron Site
(As of February 2021)

Preparer: D. Home; Date: 02/15/21
 Reviewer: E. Dulle; Date: 09/09/22

Well ID	Township	Range	Sect.	10-acre	Latitude	Longitude	Owner
146003	17N	3	30	SW-NW-SW	35.91746	-97.56775	John Kellog
142888	17N	3	30	NW-NW-SW	35.91944	-97.56769	J Keloog
146002	17N	3	30	SW-NW-SW	35.91803	-97.56745	John Kellog
169762	17N	3	30	NE-NW-SW	35.92013	-97.56529	J Keloog
137644	17N	3	30	NE-NW-SW	35.91976	-97.5645	John Kellog
137643	17N	3	30	SE-NW-SW	35.91843	-97.56444	John Kellog
45177	17N	4	25	SW-SW-SW	35.914116	-97.585097	Ed Stanton
137647	17N	4	25	SW-NW-SW	35.91826	-97.58573	P Mc Vicker
123592	17N	4	26	NE-NE-NE	35.92664	-97.58718	Greg Williams
129452	17N	4	26	SW-SW-SE	35.91371	-97.5933	Bob Heflin
151667	17N	4	26	NE-NE-SW	35.92005	-97.59653	J Henrey
153649	17N	4	26	NE-SE-NW	35.92365	-97.59699	Doug Lacey
9563	17N	4	34	NW-SW-SW	35.901324	-97.620669	Not Avail.
9981	17N	4	35	SW-NE-SE	35.90317	-97.589429	Conveying System & Mfg
22659	17N	4	35	NE-SW-SE	35.901363	-97.59166	Jerry Corteway
109655	17N	4	36	NW-SW-SE	35.9005	-97.575167	Jim Crowley
109656	17N	4	36	NW-SW-SE	35.9005	-97.575167	Jim Crowley
125433	17N	4	36	SE-SW-SE	35.899	-97.57478	jim crowley

Notes:

Sect. - Section

"Well ID" assigned by Oklahoma Water Resources Board

Table 2-2 - Revision 0
Oil/Gas Wells Near the Cimarron Site
(As of February 2021)

Preparer: D. Horne; Date: 02/15/21
 Reviewer: E. Dulle; Date: 09/09/22

API Number	Operator Number	Well Name	Well No.	Well Type	SEC	TWP	RNG	Quarter Section
Abandoned Wells								
3508322103	22182	JECH	1-35		35	17N	04W	C-NE4-NW4-SW4
3508324273	23535	WIGEON	1-9H	DRY	04	16N	03W	SW-SE-SW-SW
3508320000	23358	DATIN 16-3-7	1HM	OIL	16N	3W	16	NE-NE-NW-NW
Active Wells								
3508323995	23535	DAVIS FARMS	1-5 SWD	2DNC	05	16N	3W	SW-SE-SW-SW
3508321337	7250	STUBBLEFIELD	1	OIL	07	16N	3W	C-NE-SW
3508323211	19961	BUGG	1-7	OIL	07	16N	3W	N-S-SE
3508323822	7250	MCKAIG	1	OIL	07	16N	3W	C-S-SW-NE
3508323350	7250	STUBBLEFIELD	3	OIL	07	16N	3W	C-NE-SW-SW
3508322932	19586	POPE	1-18	OIL	18	16N	3W	NW-NE-NE
3508323917	22501	LIBERTY	1-18	OIL	18	16N	3W	W-NE-SE-NE
3508322871	19961	BUGG	1-7	OIL	07	16N	3W	SE-SE-SE
3508323359	21316	HARRIS	1	2DCm	13	16N	04W	C-NW-NE
3508323778	17042	GERALD	1-24	GAS	24	17N	04W	C-S2-SE-SE
3508323943	22501	LIBERTY	2-18	2DCm	18	16N	03W	SW-NE-SW-NE
3508323974	23535	WOLF	1-29H	OIL	29	17N	03W	NE-SE-NW-NW
3508323974	23535	WOLF	1-29H	OIL	29	17N	03W	E2-SE-SW-SW
3508323998	23535	DAVIS FARMS	2-5H	OIL	05	16N	03W	S2-S2-SW-SW
3508323998	23535	DAVIS FARMS	2-5H	OIL	05	16N	03W	C-NW-NW
3508324004	23030	MCPHAIL	1-31H	OIL	31	17N	03W	SE-SW-SE-SE
3508324004	23030	MCPHAIL	1-31H	OIL	31	17N	03W	NW-NW-NE-NE
3508324024	22501	DUFFY	1-18	GAS	18	16N	03W	NW-NW-NE-SE
3508324026	24435	ROTHER 16-4-11	1 SWD	2DNC	11	16N	04W	SW-SW-SE-SW
3508324042	23030	LOVE	1-31H	OIL	31	17N	03W	NW-NE-NW-NW
3508324054	23030	TONTZ	1-32H	OIL	32	17N	03W	N2-N2-NE-NE
3508324057	24432	ROTHER 16-4-11	2 HM	OIL	11	16N	04W	SW-SW-SE-SW
3508324092	24432	FRICK 16-4-13	1 HW	OIL	13	16N	04W	NW-NE-NW-NW
3508324094	23030	SNIPE	1-30H	OIL	30	17N	03W	NW-NW-NW-NW
3508324121	23030	TONTZ	2-29-32H	OIL	32	17N	03W	SW-SW-SE-SW
3508324121	23030	TONTZ	2-29-32H	OIL	29	17N	03W	NW-SW-SE-SW
3508324168	23535	TOUCAN	1-24H	OIL	25	17N	04W	NE-NE-NE-NE
3508324168	23535	TOUCAN	1-24H	OIL	24	17N	03W	NW-NE-NE-NE
3508324187	23030	GREGORY	1-10-3H	OIL	10	17N	04W	NE-NE-NE-NW
3508324187	23030	GREGORY	1-10-3H	OIL	03	17N	04W	NE-NE-NE-NW
3508324203	23535	WIGEON	1-4H	OIL	04	16N	03W	NE-NW-NW-NW
3508324203	23535	WIGEON	1-4H	OIL	04	16N	03W	SW-SE-SW-SW
3508324208	23030	FOX	2-16-9H	OIL	09	16N	04W	NE-NE-NW-NW
3508324208	23030	FOX	2-16-9H	OIL	16	16N	04W	NW-SW-NW-NE

Table 2-2 - Revision 0
Oil/Gas Wells Near the Cimarron Site
(As of February 2021)

Preparer: D. Horne; Date: 02/15/21
 Reviewer: E. Dulle; Date: 09/09/22

API Number	Operator Number	Well Name	Well No.	Well Type	SEC	TWP	RNG	Quarter Section
3508324229	24432	CIMARRON RIVER 16-4-12	1HW	OIL	13	16N	04W	NW-NE-NW-NW
3508324229	24432	CIMARRON RIVER 16-4-12	1HW	OIL	12	16N	04W	NE-NW-NW-NW
3508324263	24432	KAY ROTHER 16-4-14	1 HW	OIL	14	16N	04W	NW-NE-NW-NE
3508324263	24432	KAY ROTHER 16-4-14	1 HW	OIL	12	16N	04W	SE-SW-SE-SE
3508324268	24432	KAY ROTHER 16-4-14	1 HM	OIL	14	16N	04W	NW-NE-NW-NE
3508324268	24432	KAY ROTHER 16-4-14	1 HM	OIL	14	16N	04W	SW-SW-SE-SE
3508324280	23535	DAVIS FARMS	1-6H	OIL	05	16N	03W	SE-SW-SW-SW
3508324281	23030	FOX	3-16-9H	OIL	16	16N	04W	NE-SW-NW-NE
3508324294	24432	DATIN 16-3-7	1HM	OIL	07	16N	03W	SE-SE-SW-SW
3508324294	24432	DATIN 16-3-7	1HM	OIL	07	16N	03W	NE-NE-NW-NW
3508324325	23030	MOSIER	2-4H	OIL	04	16N	04W	NE-SE-NE-NW
3508324325	23030	MOSIER	2-4H	OIL	04	16N	04W	SW-SW-SW-SE
3508324406	21316	HARRIS SWD	2	2DCm	13	16N	04W	NE-SW-NW-NE

Notes

API - API Well Number

SEC - Section

TWP - Township

RNG - Range

Data was taken from *Well Completion List -Master* located on <https://oklahoma.gov/occ/divisions/oil-gas/oil-gas-data>.
 Accessed February 8, 2021.

Table 2-3 - Revision 0
Historical Earthquakes in Oklahoma
Greater than 3.0 Magnitude
(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2021-02-06T10:01:27.899Z	36.292	-97.52033	6 km ESE of Covington, Oklahoma	7.28	3.36	ml
2021-02-05T17:48:45.719Z	36.289	-97.51583	5 km WNW of Lucien, Oklahoma	6.67	4.2	mwr
2021-02-05T16:17:37.100Z	36.2881667	-97.51967	6 km WNW of Lucien, Oklahoma	6.59	3.65	ml
2021-02-05T16:16:56.929Z	36.2848333	-97.5115	5 km WNW of Lucien, Oklahoma	6.66	3.52	ml
2020-12-30T11:04:44.286Z	37.708	-97.2403	3 km NE of Eastborough, Kansas	5	3.7	mwr
2020-12-23T21:28:14.519Z	36.5343333	-98.98367	10 km NNE of Quinlan, Oklahoma	6.97	3.11	ml
2020-12-19T18:52:23.610Z	37.7205	-97.2149	5 km NE of Eastborough, Kansas	5	3.4	mb_lg
2020-12-19T18:47:54.655Z	37.7156	-97.2279	4 km NE of Eastborough, Kansas	5	3.4	mwr
2020-12-10T00:53:25.719Z	36.5298333	-98.98817	9 km NNE of Quinlan, Oklahoma	7.88	3.02	ml
2020-12-08T16:54:03.780Z	37.718	-97.2422	3 km NNE of Eastborough, Kansas	5	3	mb_lg
2020-10-26T06:08:57.226Z	38.6838	-97.0718	0 km SSE of Hope, Kansas	5	3	mb_lg
2020-10-24T02:49:00.783Z	38.7205	-97.0628	3 km NNE of Hope, Kansas	5	3	mb_lg
2020-10-23T04:08:12.289Z	36.874	-97.44683	7 km N of Nardin, Oklahoma	7.56	3.32	ml
2020-10-23T01:17:33.130Z	36.8743333	-97.4485	7 km N of Nardin, Oklahoma	7.76	3.22	ml
2020-10-22T04:37:08.650Z	36.3645	-97.3445	9 km NNW of Perry, Oklahoma	6.95	3.1	ml
2020-10-21T14:33:28.399Z	36.2765	-97.49833	3 km W of Lucien, Oklahoma	7.31	3.17	ml
2020-09-20T10:54:54.000Z	36.1288333	-97.59217	4 km SE of Marshall, Oklahoma	7.17	3.4	ml
2020-09-06T11:08:14.710Z	34.745	-97.573	7 km SSE of Erin Springs, Oklahoma	7	3.43	ml
2020-08-31T15:18:24.660Z	36.3616667	-98.1515	3 km SE of Meno, Oklahoma	6.69	3.5	ml
2020-08-16T02:49:46.619Z	36.1526667	-97.66833	3 km W of Marshall, Oklahoma	5.16	3.09	ml
2020-08-14T08:27:17.579Z	36.3588333	-97.34967	9 km NW of Perry, Oklahoma	7.05	3.2	ml
2020-08-05T10:13:10.859Z	36.2908333	-98.17433	5 km N of Ames, Oklahoma	7.93	3.05	ml
2020-08-03T23:13:45.670Z	36.3576667	-97.3595	9 km NW of Perry, Oklahoma	7.56	3.44	ml
2020-07-15T15:07:21.140Z	36.8701667	-97.43367	7 km N of Nardin, Oklahoma	7	3.45	ml
2020-06-25T22:43:23.570Z	36.416	-98.13367	18km SE of Helena, Oklahoma	7.92	3	ml
2020-06-22T21:47:59.909Z	36.865	-97.4355	15km WNW of Blackwell, Oklahoma	5	3.7	ml
2020-06-21T03:15:41.689Z	36.3588333	-97.35883	8km NW of Perry, Oklahoma	7.78	4.2	mwr
2020-06-18T18:38:13.869Z	35.5203333	-96.78517	9km WNW of Prague, Oklahoma	7	3.04	ml
2020-06-03T23:00:27.260Z	36.3548333	-97.357	10km NW of Perry, Oklahoma	7.71	3.41	ml
2020-05-24T14:53:59.740Z	36.3645	-98.1585	23km SSE of Helena, Oklahoma	7.89	3.87	ml
2020-05-17T11:10:49.119Z	34.9745	-97.69883	18km S of Blanchard, Oklahoma	11.2	3.05	ml
2020-05-08T01:58:40.079Z	36.0266667	-98.0935	19km WSW of Hennessey, Oklahoma	5.75	3	ml
2020-05-04T19:34:22.679Z	36.0235	-98.0955	19km WSW of Hennessey, Oklahoma	5.85	3.24	ml
2020-05-02T00:50:10.330Z	35.1015	-97.78367	12km ENE of Chickasha, Oklahoma	9.63	3.26	ml
2020-04-25T03:59:36.250Z	36.8626667	-97.43733	15km WNW of Blackwell, Oklahoma	5	3.33	ml
2020-04-04T03:33:08.050Z	36.3761667	-97.718	14km E of Enid, Oklahoma	5	3.6	mwr
2020-04-03T22:35:29.949Z	36.3745	-97.7205	15km ESE of Enid, Oklahoma	5	3.65	mwr
2020-04-01T18:40:38.159Z	35.1448333	-95.352	2km ENE of Quinton, Oklahoma	8.84	3.05	ml
2020-03-29T18:07:28.260Z	36.6901667	-97.6865	13km SSE of Medford, Oklahoma	5	3.12	ml
2020-03-26T17:00:04.169Z	36.3536667	-97.3545	10km NW of Perry, Oklahoma	6	3.36	ml
2020-03-22T17:50:50.454Z	38.699	-97.1001	14km WNW of Herington, Kansas	5	3.1	mb_lg
2020-03-19T08:42:03.189Z	35.105	-97.77083	11km WSW of Blanchard, Oklahoma	8.43	3.02	ml
2020-03-12T05:33:48.607Z	38.7397	-97.0401	11km NW of Herington, Kansas	5	3.5	mb_lg
2020-03-06T01:42:14.169Z	34.9668333	-97.708	18km SSW of Blanchard, Oklahoma	10.2	3.38	ml
2020-02-08T23:19:15.275Z	37.0626	-97.9778	11km SSE of Anthony, Kansas	5	3.5	mb_lg
2020-02-07T02:42:26.079Z	35.0988333	-95.3885	2km SW of Quinton, Oklahoma	6.33	3.21	ml
2020-02-07T01:49:01.860Z	35.1013333	-95.3845	2km SW of Quinton, Oklahoma	5.82	3.24	ml
2020-01-29T23:19:35.733Z	38.3889	-96.9189	9km ENE of Marion, Kansas	5	3.1	mb_lg
2020-01-19T19:08:42.322Z	38.0246	-97.973	2km W of South Hutchinson, Kansas	5	4.5	mwr
2020-01-11T05:40:17.809Z	36.2918333	-98.17233	23km W of Waukomis, Oklahoma	4.01	3.44	ml
2020-01-01T07:04:14.310Z	36.4115	-98.14467	19km SE of Helena, Oklahoma	7.8	3.08	ml
2019-12-30T05:57:55.689Z	36.8743333	-97.91333	17km WNW of Medford, Oklahoma	7.35	3.73	ml
2019-12-25T11:24:33.350Z	35.9073333	-98.52317	12km WNW of Watonga, Oklahoma	7.53	3.38	ml
2019-12-15T16:09:05.679Z	35.799	-96.65467	4km N of Stroud, Oklahoma	7.09	3.59	ml
2019-12-03T21:36:15.380Z	35.1401667	-95.32733	3km E of Quinton, Oklahoma	6.77	3.07	ml
2019-12-02T12:12:11.259Z	35.5381667	-96.76133	8km NW of Prague, Oklahoma	9.66	3.75	ml
2019-11-27T15:43:06.669Z	35.8476667	-98.07233	12km W of Kingfisher, Oklahoma	6.58	3.05	ml
2019-11-24T11:24:55.530Z	35.8236667	-98.0975	15km WSW of Kingfisher, Oklahoma	6.3	3.48	ml
2019-11-22T21:54:49.700Z	36.2906667	-98.18767	21km NNE of Okeene, Oklahoma	6.01	3.57	ml
2019-11-22T21:54:05.660Z	36.2941667	-98.19133	22km NNE of Okeene, Oklahoma	6.15	3.58	ml
2019-11-22T05:44:36.170Z	36.3693333	-97.70783	15km E of Enid, Oklahoma	8.84	3.6	mwr
2019-11-11T23:21:12.511Z	38.4752	-96.9101	16km NNE of Marion, Kansas	5	3	mb_lg
2019-11-05T11:03:56.210Z	36.7025	-97.66167	12km SSE of Medford, Oklahoma	7.38	3.06	ml

Table 2-3 - Revision 0
Historical Earthquakes in Oklahoma
Greater than 3.0 Magnitude
(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
 Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2019-11-03T02:08:58.556Z	38.0276	-97.9828	3km W of South Hutchinson, Kansas	2.21	3	mwr
2019-10-23T21:39:04.735Z	38.0193	-97.9773	3km WSW of South Hutchinson, Kansas	4.03	3.1	mb lg
2019-10-22T21:03:58.750Z	36.9295	-98.02467	24km S of Anthony, Kansas	6.5	3.67	ml
2019-10-21T16:09:15.339Z	35.132	-95.3495	2km N of Quinton, Oklahoma	5	3.13	ml
2019-10-08T19:47:35.759Z	36.0311667	-98.08733	19km WSW of Hennessey, Oklahoma	6.2	3.01	ml
2019-10-08T19:10:45.210Z	36.0293333	-98.08867	19km WSW of Hennessey, Oklahoma	5.84	3.03	ml
2019-09-27T14:50:59.979Z	36.475	-98.744	32km NW of Fairview, Oklahoma	8.22	3.45	ml
2019-09-21T23:38:10.449Z	35.897	-98.53183	12km WNW of Watonga, Oklahoma	5.29	3.09	ml
2019-09-21T23:38:08.730Z	35.8965	-98.5265	12km WNW of Watonga, Oklahoma	6.71	3.09	ml
2019-09-21T08:31:33.894Z	37.1058	-97.5957	8km N of Caldwell, Kansas	5	3	mb lg
2019-09-17T06:44:43.250Z	36.9223333	-97.4815	16km SE of Caldwell, Kansas	6.06	3.25	ml
2019-09-16T14:59:34.201Z	38.359	-96.8849	11km E of Marion, Kansas	5	3.2	mb lg
2019-09-16T07:37:27.525Z	38.487	-96.7491	22km NW of Cottonwood Falls, Kansas	5	3.8	mb
2019-09-09T17:57:06.830Z	36.427	-96.9045	13km NW of Pawnee, Oklahoma	6.62	3.25	ml
2019-09-02T22:08:39.000Z	36.9283333	-97.4745	16km SE of Caldwell, Kansas	7.65	3.24	ml
2019-09-01T13:21:06.651Z	38.034	-97.9805	3km W of South Hutchinson, Kansas	3.13	3.1	mb lg
2019-08-29T08:39:35.780Z	35.1031667	-96.3185	8km E of Holdenville, Oklahoma	3.02	3.03	ml
2019-08-18T09:07:13.009Z	35.1273333	-95.353	2km NNE of Quinton, Oklahoma	5.9	3.71	mwr
2019-08-18T08:45:29.680Z	38.0146	-98.005	5km WSW of South Hutchinson, Kansas	5	4.1	mwr
2019-08-17T01:03:39.363Z	38.0204	-98.0021	5km W of South Hutchinson, Kansas	5	3.1	mb lg
2019-08-16T13:10:49.939Z	37.9952	-98.0943	14km WSW of South Hutchinson, Kansas	5	3.1	mb lg
2019-08-16T12:59:10.201Z	38.0254	-97.9827	3km W of South Hutchinson, Kansas	5	4.2	mwr
2019-08-13T19:40:19.929Z	36.7016667	-97.66233	12km SSE of Medford, Oklahoma	7.2	3.44	ml
2019-08-12T01:26:45.859Z	35.1338333	-95.35583	1km ENE of Quinton, Oklahoma	5	3.19	ml
2019-08-09T06:34:58.329Z	35.8081667	-98.11267	15km NW of Okarche, Oklahoma	7	3.43	ml
2019-08-07T23:38:24.539Z	35.8311667	-98.09333	15km WSW of Kingfisher, Oklahoma	7	3.46	ml
2019-08-02T10:56:18.969Z	36.3616667	-98.15283	23km SSE of Helena, Oklahoma	7.18	3.37	mwr
2019-07-27T12:52:50.210Z	35.8343333	-98.089	14km WSW of Kingfisher, Oklahoma	6.81	3.12	ml
2019-07-27T04:23:28.100Z	35.831	-98.09067	14km W of Kingfisher, Oklahoma	7.37	3.52	ml
2019-07-25T18:10:23.199Z	35.8416667	-98.0785	12km W of Kingfisher, Oklahoma	7.47	3.35	ml
2019-07-25T09:39:49.439Z	35.8426667	-98.07567	12km W of Kingfisher, Oklahoma	7.46	3.33	ml
2019-07-25T05:48:18.660Z	35.843	-98.076	12km W of Kingfisher, Oklahoma	6.45	3.91	ml
2019-07-25T02:36:33.560Z	36.0361667	-98.07717	17km WSW of Hennessey, Oklahoma	6.82	3.03	ml
2019-07-25T02:36:32.509Z	36.0278333	-98.09117	19km WSW of Hennessey, Oklahoma	5.77	3.33	ml
2019-07-24T23:25:52.810Z	35.8151667	-98.09283	12km W of Kingfisher, Oklahoma	7	3.16	ml
2019-07-09T14:44:09.019Z	35.8376667	-98.07917	12km W of Kingfisher, Oklahoma	6.29	3.11	ml
2019-06-20T11:23:03.600Z	36.2891667	-97.51083	19km W of Perry, Oklahoma	7.26	3.02	ml
2019-06-14T03:15:21.170Z	35.7988333	-96.6555	5km N of Stroud, Oklahoma	7.09	3.44	ml
2019-05-26T12:54:07.890Z	36.7	-97.6962	12km SSE of Medford, Oklahoma	5	3.1	mb lg
2019-05-18T09:55:36.727Z	36.7037	-97.6626	13km SSE of Medford, Oklahoma	5	3.3	mwr
2019-05-17T20:33:15.683Z	36.6697	-97.7055	15km S of Medford, Oklahoma	5	4.4	mwr
2019-05-16T22:53:43.486Z	35.98	-96.7982	2km WSW of Cushing, Oklahoma	5	3.1	mwr
2019-05-16T18:19:46.826Z	35.0879	-96.29	9km E of Holdenville, Oklahoma	5	3.3	mb lg
2019-04-30T04:51:25.095Z	36.6971	-97.6852	12km SSE of Medford, Oklahoma	2.95	3.1	mwr
2019-03-22T22:36:19.199Z	36.6956667	-97.68717	11km SSE of Medford, Oklahoma	7.44	3.19	ml
2019-03-01T00:15:23.350Z	35.7312	-97.566	11km NW of Edmond, Oklahoma	5	3.1	mb lg
2019-02-28T02:13:48.140Z	36.2719	-97.4989	19km W of Perry, Oklahoma	5	3.2	mwr
2019-02-27T13:01:06.160Z	36.8786	-97.9145	17km WNW of Medford, Oklahoma	6.76	3.2	mwr
2019-02-26T23:50:24.770Z	36.878	-97.9301	19km WNW of Medford, Oklahoma	5	3.8	mwr
2019-02-19T18:08:10.770Z	35.1046	-97.8624	8km NE of Chickasha, Oklahoma	5	3	mb lg
2019-02-14T00:48:30.899Z	36.4105	-96.8711	10km NW of Pawnee, Oklahoma	5	3.2	mb lg
2019-02-13T16:39:49.890Z	35.5582	-97.1129	8km NNE of Harrah, Oklahoma	5	3.4	mb lg
2019-01-25T18:32:40.780Z	37.06	-97.3647	21km E of Caldwell, Kansas	4.29	3.3	mwr
2019-01-21T05:27:36.080Z	36.3725	-98.1353	22km SSE of Helena, Oklahoma	5	3.3	mb lg
2019-01-17T03:55:06.320Z	37.0741	-97.975	10km SSE of Anthony, Kansas	10	3.1	ml
2019-01-16T03:34:30.470Z	37.0649	-97.3543	22km S of Wellington, Kansas	5	4	mwr
2019-01-15T13:28:02.210Z	36.2129	-97.5715	26km WSW of Perry, Oklahoma	5	3.9	mwr
2019-01-14T08:20:07.540Z	36.2715	-97.624	24km E of Waukomis, Oklahoma	5	3.6	mb lg
2019-01-06T10:38:29.500Z	36.372	-98.1346	22km SSE of Helena, Oklahoma	5	3	mb lg
2018-12-29T04:05:57.890Z	36.0998	-97.8674	3km ESE of Hennessey, Oklahoma	5	3	mb lg
2018-12-28T12:32:28.980Z	36.3858	-98.386	15km NNE of Fairview, Oklahoma	5	3.1	mb lg
2018-12-22T23:20:25.020Z	36.879	-97.9152	18km WNW of Medford, Oklahoma	7.21	3.1	ml
2018-12-17T07:42:48.230Z	36.4566	-98.7897	34km NW of Fairview, Oklahoma	5	3	mb lg

Table 2-3 - Revision 0
Historical Earthquakes in Oklahoma
Greater than 3.0 Magnitude
(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
 Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2018-12-15T21:31:04.050Z	36.2856	-97.5158	20km W of Perry, Oklahoma	4.86	3	mb_lg
2018-12-15T06:09:27.520Z	36.4483	-98.778	33km NW of Fairview, Oklahoma	5	3.1	mb_lg
2018-12-10T06:23:03.630Z	34.0395	-97.406	13km S of Wilson, Oklahoma	19.61	3	ml
2018-12-05T16:55:16.730Z	36.1019	-97.8459	4km E of Hennessey, Oklahoma	5	3	mb_lg
2018-12-05T02:02:59.100Z	36.4547	-98.8018	35km NW of Fairview, Oklahoma	5.79	3.2	ml
2018-12-02T00:12:48.870Z	36.4162	-96.9059	12km NW of Pawnee, Oklahoma	7.17	3.1	mb_lg
2018-11-30T23:56:05.550Z	37.3583	-97.9744	9km NNE of Harper, Kansas	5.8	3.2	mb_lg
2018-11-27T08:07:07.060Z	34.6387	-96.3223	14km NW of Coalgate, Oklahoma	6.07	3.2	ml
2018-11-26T15:42:49.810Z	34.053	-97.4342	12km S of Wilson, Oklahoma	6	3.1	ml
2018-11-26T13:52:51.530Z	34.6437	-96.3232	15km NW of Coalgate, Oklahoma	5.68	3	ml
2018-11-26T13:46:12.670Z	34.6358	-96.3272	14km NW of Coalgate, Oklahoma	5.8	3.1	ml
2018-11-25T22:24:48.620Z	35.233	-97.7888	6km SSE of Tuttle, Oklahoma	6	3	ml
2018-11-22T23:01:52.440Z	36.9198	-97.9274	21km NW of Medford, Oklahoma	5	3.1	ml
2018-11-19T18:12:55.280Z	35.0272	-97.623	12km SSE of Blanchard, Oklahoma	9.2	3	ml
2018-11-18T04:57:58.210Z	35.8532	-97.8183	10km E of Kingfisher, Oklahoma	6.54	3	ml
2018-11-16T17:25:19.970Z	36.9648	-97.8413	19km NNW of Medford, Oklahoma	7.3	3	ml
2018-11-14T03:08:50.040Z	36.2908	-97.0122	19km NNE of Stillwater, Oklahoma	5.32	3.3	mb_lg
2018-11-12T18:39:18.780Z	36.4018	-96.8737	9km NW of Pawnee, Oklahoma	5	3	mb_lg
2018-11-05T00:53:57.000Z	35.2355	-97.7523	8km SE of Tuttle, Oklahoma	6.28	3.3	ml
2018-10-25T10:26:01.200Z	35.9631	-97.2321	2km NE of Langston, Oklahoma	4.964	3	ml
2018-10-23T11:29:00.600Z	34.0524	-97.4131	12km S of Wilson, Oklahoma	6.535	3.4	ml
2018-10-22T18:33:30.900Z	36.2176	-98.9302	20km N of Taloga, Oklahoma	3.965	3.1	ml
2018-10-10T10:24:53.800Z	35.6779	-97.0834	10km E of Luther, Oklahoma	6.132	3.6	ml
2018-10-09T22:32:36.500Z	36.842	-97.6888	5km NE of Medford, Oklahoma	2.542	3.5	ml
2018-10-03T09:28:05.100Z	36.2204	-98.9368	20km N of Taloga, Oklahoma	5.54	3.3	ml
2018-10-03T07:36:41.360Z	37.371	-97.984	10km NNE of Harper, Kansas	5	3.5	mb_lg
2018-10-02T10:29:16.300Z	36.2203	-98.9298	20km N of Taloga, Oklahoma	3.755	3	ml
2018-10-01T00:33:23.300Z	37.1802	-97.4537	11km SW of Wellington, Kansas	6.47	3	ml
2018-09-29T12:45:47.400Z	36.1793	-97.4823	21km SW of Perry, Oklahoma	5.48	3.4	mwr
2018-09-28T07:07:08.700Z	35.0418	-97.5829	12km SSE of Blanchard, Oklahoma	6.989	3	ml
2018-09-27T03:46:11.000Z	35.9603	-97.2337	2km NE of Langston, Oklahoma	6.707	3.3	ml
2018-09-27T01:55:52.600Z	36.2051	-98.921	18km NNE of Taloga, Oklahoma	6.133	3	ml
2018-09-26T21:47:49.000Z	34.0505	-97.4332	12km S of Wilson, Oklahoma	6.384	3	ml
2018-09-26T07:37:17.300Z	36.1555	-98.2908	4km NNE of Okeene, Oklahoma	5.106	3	ml
2018-09-24T19:46:05.700Z	35.9609	-97.2376	2km NE of Langston, Oklahoma	6.085	3.1	ml
2018-09-19T05:15:16.000Z	35.8444	-97.3384	8km ESE of Guthrie, Oklahoma	4.48	3	ml
2018-09-13T18:30:50.000Z	36.8261	-98.4513	11km NW of Cherokee, Oklahoma	3.145	3	ml
2018-09-13T07:43:31.750Z	37.3406	-97.9786	7km NE of Harper, Kansas	5.3	3.1	mb_lg
2018-09-11T16:11:29.400Z	36.2153	-97.5688	26km WSW of Perry, Oklahoma	6.708	3.3	ml
2018-09-09T01:48:38.500Z	36.489	-98.7253	32km NW of Fairview, Oklahoma	7.712	3.5	ml
2018-09-08T14:36:33.400Z	36.4603	-98.7576	32km NW of Fairview, Oklahoma	7.664	3.5	mwr
2018-09-08T06:23:24.870Z	37.1983	-97.7742	23km ENE of Anthony, Kansas	6.46	3.7	mb
2018-08-31T04:44:29.930Z	37.3866	-97.9537	12km NNE of Harper, Kansas	5	3	mb_lg
2018-08-30T20:37:08.100Z	37.3356	-97.8648	15km ENE of Harper, Kansas	5	3.9	mwr
2018-08-30T04:54:14.130Z	37.361	-97.851	17km ENE of Harper, Kansas	10.32	3.2	mb_lg
2018-08-30T00:12:55.860Z	37.3722	-97.8452	18km ENE of Harper, Kansas	5	3.1	mb_lg
2018-08-29T23:56:20.270Z	37.3549	-97.859	16km ENE of Harper, Kansas	9.75	3	mb_lg
2018-08-29T03:04:06.600Z	36.4571	-98.8042	35km NW of Fairview, Oklahoma	4.87	3.2	mwr
2018-08-27T07:44:55.020Z	37.3656	-97.9945	9km NNE of Harper, Kansas	5	3.4	mb_lg
2018-08-15T10:27:57.510Z	37.3567	-97.9802	8km NNE of Harper, Kansas	5	3	mb_lg
2018-08-13T19:08:11.500Z	34.9882	-97.5381	16km W of Purcell, Oklahoma	3.692	3	ml
2018-08-13T18:01:24.300Z	36.5158	-99.0066	19km ENE of Mooreland, Oklahoma	5.93	3	ml
2018-08-08T23:07:43.200Z	36.2135	-97.5522	25km WSW of Perry, Oklahoma	6.676	3	ml
2018-08-08T02:57:26.300Z	36.8451	-97.6978	5km NE of Medford, Oklahoma	6.957	3.4	mwr
2018-08-06T10:39:22.600Z	36.4561	-98.7891	34km NW of Fairview, Oklahoma	6.28	3	ml
2018-08-03T20:58:21.400Z	36.482	-97.7331	16km NE of Enid, Oklahoma	4.843	3.2	ml
2018-08-01T10:11:14.000Z	35.0409	-97.5912	12km SSE of Blanchard, Oklahoma	6.139	3.4	mwr
2018-07-31T05:12:54.700Z	36.7774	-98.6821	3km SSW of Alva, Oklahoma	11.247	3.2	ml
2018-07-27T10:43:06.600Z	36.8475	-97.6964	5km NE of Medford, Oklahoma	6.883	3.3	ml
2018-07-27T10:06:44.100Z	36.6324	-98.5139	19km SW of Cherokee, Oklahoma	6.325	3.1	ml
2018-07-26T21:02:00.900Z	36.4462	-98.7791	33km NW of Fairview, Oklahoma	7.796	3.3	ml
2018-07-26T20:42:49.000Z	35.7956	-97.1937	14km N of Luther, Oklahoma	5.407	3	ml
2018-07-24T22:35:57.500Z	35.6707	-97.406	6km ENE of Edmond, Oklahoma	7.139	3.3	mwr

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(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2018-07-24T21:10:29.500Z	35.6711	-97.4003	7km ENE of Edmond, Oklahoma	6.654	3.2	ml
2018-07-20T21:01:54.600Z	35.8972	-97.2759	5km SSW of Langston, Oklahoma	6.659	3.1	ml
2018-07-20T19:46:56.300Z	35.8955	-97.2745	5km SSW of Langston, Oklahoma	7.285	3	ml
2018-07-18T05:19:28.400Z	36.6572	-98.467	14km SW of Cherokee, Oklahoma	7.343	3.2	ml
2018-07-18T04:48:52.000Z	36.6571	-98.4679	14km SW of Cherokee, Oklahoma	7.309	3	ml
2018-07-17T20:38:07.850Z	35.655	-97.4134	5km E of Edmond, Oklahoma	6	3.1	mb_lg
2018-07-13T06:06:05.700Z	36.4543	-98.7663	32km NW of Fairview, Oklahoma	8.725	3.2	mwr
2018-07-10T11:56:36.000Z	36.848	-97.6983	5km NE of Medford, Oklahoma	7.906	3.1	ml
2018-07-10T07:18:17.500Z	36.2977	-97.5297	21km W of Perry, Oklahoma	7.735	3.4	mwr
2018-07-07T21:50:12.700Z	36.9859	-97.4955	11km ESE of Caldwell, Kansas	5.353	3.4	ml
2018-07-02T21:08:51.500Z	35.8906	-97.2822	6km SSW of Langston, Oklahoma	6.136	3.5	ml
2018-07-02T12:28:04.200Z	35.9739	-97.7967	17km NE of Kingfisher, Oklahoma	5.676	3	ml
2018-07-02T00:03:12.700Z	36.7628	-98.0658	25km E of Cherokee, Oklahoma	6.792	3.1	ml
2018-07-01T02:58:14.200Z	35.8891	-97.2831	6km SSW of Langston, Oklahoma	6.283	3.2	ml
2018-06-30T06:28:14.500Z	35.3761	-98.1118	15km W of Union City, Oklahoma	11.976	3.1	ml
2018-06-27T14:04:25.230Z	37.2998	-97.4185	5km NW of Wellington, Kansas	5	3.2	mb_lg
2018-06-22T23:38:20.000Z	36.6684	-98.7615	17km SSW of Alva, Oklahoma	6.545	3	ml
2018-06-22T03:29:55.200Z	36.1016	-97.8355	5km E of Hennessey, Oklahoma	5.048	3.2	mwr
2018-06-19T16:00:38.600Z	36.2788	-97.5072	19km W of Perry, Oklahoma	8.366	3.8	ml
2018-06-19T15:58:09.800Z	35.3674	-98.0687	11km WSW of Union City, Oklahoma	6.614	3.1	ml
2018-06-18T22:21:22.930Z	37.3495	-97.973	8km NE of Harper, Kansas	5	3.1	mb_lg
2018-06-17T06:16:15.400Z	36.0677	-97.5723	12km N of Crescent, Oklahoma	6.252	3.3	ml
2018-06-15T20:56:08.600Z	36.0742	-97.5593	13km NNE of Crescent, Oklahoma	6.615	4	mwr
2018-06-11T19:20:31.500Z	36.4909	-98.6218	27km NNW of Fairview, Oklahoma	5.851	3.1	ml
2018-06-09T13:59:41.400Z	36.764	-98.062	26km E of Cherokee, Oklahoma	9.5	4.4	mwr
2018-06-08T19:14:00.400Z	36.286	-97.5107	20km W of Perry, Oklahoma	6.597	3.2	ml
2018-06-07T07:01:54.100Z	36.286	-97.5091	19km W of Perry, Oklahoma	6.281	3.1	ml
2018-06-06T12:25:31.000Z	36.2309	-97.2945	6km S of Perry, Oklahoma	7.069	3	ml
2018-06-04T23:16:44.700Z	36.817	-97.6114	10km E of Medford, Oklahoma	5.712	3.1	ml
2018-06-04T11:23:57.400Z	36.6968	-97.6837	13km SSE of Medford, Oklahoma	6.788	3.2	mwr
2018-05-26T19:26:41.500Z	35.9936	-96.7497	1km ENE of Cushing, Oklahoma	4.372	3.2	ml
2018-05-23T00:15:49.000Z	35.6805	-97.3925	8km ENE of Edmond, Oklahoma	5.467	3.4	ml
2018-05-17T20:05:45.000Z	36.0674	-97.5709	12km N of Crescent, Oklahoma	6.077	3.7	ml
2018-05-15T13:40:21.500Z	36.0725	-97.5641	13km NNE of Crescent, Oklahoma	6.29	4	mwr
2018-05-14T09:22:25.100Z	36.0706	-97.5685	13km N of Crescent, Oklahoma	8.172	3	ml
2018-05-14T07:25:00.600Z	36.0713	-97.5655	13km NNE of Crescent, Oklahoma	6.858	4	mwr
2018-05-14T05:02:54.900Z	36.0718	-97.5679	13km N of Crescent, Oklahoma	7.949	3	ml
2018-05-13T23:28:48.300Z	36.0716	-97.5655	13km N of Crescent, Oklahoma	7.435	3.7	mwr
2018-05-09T17:25:15.500Z	36.5352	-98.9636	24km ENE of Mooreland, Oklahoma	5.829	3	ml
2018-04-30T11:01:24.400Z	36.4609	-98.7946	35km NW of Fairview, Oklahoma	5.364	3.2	ml
2018-04-28T05:53:25.500Z	36.1026	-97.8347	5km E of Hennessey, Oklahoma	5	3	ml
2018-04-26T19:23:18.300Z	36.945	-97.6324	9km SSW of Caldwell, Kansas	6.767	3	ml
2018-04-25T14:52:58.700Z	36.9404	-97.6368	10km SSW of Caldwell, Kansas	4.217	3	ml
2018-04-25T14:46:21.500Z	36.947	-97.6251	9km S of Caldwell, Kansas	6.908	3	ml
2018-04-24T13:17:48.000Z	36.4642	-96.8665	15km NNW of Pawnee, Oklahoma	5	3.4	ml
2018-04-21T14:26:02.100Z	36.1252	-97.2366	16km W of Stillwater, Oklahoma	5.233	3	ml
2018-04-20T19:53:34.100Z	36.9394	-97.6233	10km S of Caldwell, Kansas	5	3.1	ml
2018-04-20T19:33:54.800Z	36.9424	-97.6323	10km SSW of Caldwell, Kansas	5.863	3	ml
2018-04-20T19:28:49.100Z	36.9451	-97.6185	9km S of Caldwell, Kansas	5.546	3.6	mwr
2018-04-19T10:32:44.000Z	36.0386	-97.9022	7km S of Hennessey, Oklahoma	5.6	3.1	ml
2018-04-19T07:20:05.600Z	36.036	-97.9043	8km S of Hennessey, Oklahoma	5.88	3.5	ml
2018-04-19T06:36:34.900Z	36.4506	-98.7849	34km NW of Fairview, Oklahoma	6.355	3.6	mwr
2018-04-17T08:57:59.200Z	35.7812	-98.576	16km WSW of Watonga, Oklahoma	2.863	3.1	ml
2018-04-14T02:46:34.090Z	38.0247	-97.9926	4km W of South Hutchinson, Kansas	5	3.2	mb_lg
2018-04-09T10:22:20.300Z	36.2185	-97.5735	26km WSW of Perry, Oklahoma	4.935	4.6	mww
2018-04-09T09:26:31.200Z	36.2151	-97.5686	26km WSW of Perry, Oklahoma	6.35	3.1	mwr
2018-04-08T22:26:24.500Z	36.2982	-97.5311	21km W of Perry, Oklahoma	6.796	3.1	ml
2018-04-08T07:25:32.970Z	37.199	-97.7747	23km ENE of Anthony, Kansas	6.21	3.5	ml
2018-04-07T16:21:21.400Z	35.6721	-97.4039	7km ENE of Edmond, Oklahoma	6.916	3.5	ml
2018-04-07T12:23:23.800Z	36.2871	-97.5092	19km W of Perry, Oklahoma	7.266	3.7	ml
2018-04-07T12:16:03.300Z	36.2896	-97.5166	20km W of Perry, Oklahoma	5.791	4.6	mww
2018-04-07T09:48:03.500Z	36.2189	-97.5735	26km WSW of Perry, Oklahoma	6.271	3.3	ml
2018-04-06T15:21:31.500Z	36.2884	-97.5152	20km W of Perry, Oklahoma	8.169	3	ml

Table 2-3 - Revision 0
Historical Earthquakes in Oklahoma
Greater than 3.0 Magnitude
(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
Reviewer: E. Dulie; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2018-04-06T15:07:12.900Z	36.2854	-97.5106	19km W of Perry, Oklahoma	6.292	3.9	mwr
2018-04-06T15:05:26.600Z	36.2831	-97.5084	19km W of Perry, Oklahoma	7.996	3	ml
2018-04-05T08:51:40.900Z	36.4671	-96.8676	15km NNW of Pawnee, Oklahoma	5.004	3.5	ml
2018-04-04T18:17:12.700Z	36.4665	-96.8674	15km NNW of Pawnee, Oklahoma	4.5	3.6	ml
2018-04-03T08:07:01.000Z	36.0865	-97.5442	15km NNE of Crescent, Oklahoma	6.283	3.1	ml
2018-04-01T01:34:49.700Z	35.378	-98.092	13km W of Union City, Oklahoma	7.15	3.1	ml
2018-03-24T17:07:57.000Z	36.8455	-97.7005	5km NE of Medford, Oklahoma	7.565	3	ml
2018-03-24T13:30:56.200Z	36.9938	-97.4917	11km ESE of Caldwell, Kansas	6.718	3.2	ml
2018-03-24T08:19:47.500Z	36.6963	-97.6853	13km SSE of Medford, Oklahoma	8.475	3.3	ml
2018-03-24T07:06:02.900Z	36.4849	-97.7577	14km NE of Enid, Oklahoma	7.368	3.1	ml
2018-03-23T01:43:09.600Z	35.8653	-96.6804	13km N of Stroud, Oklahoma	6.046	3	ml
2018-03-21T18:04:42.900Z	35.9725	-97.7941	17km NE of Kingfisher, Oklahoma	6.204	3	ml
2018-03-20T23:24:56.500Z	36.4534	-98.7699	33km NW of Fairview, Oklahoma	8.229	3.4	ml
2018-03-16T10:59:41.600Z	36.7131	-99.386	25km ESE of Buffalo, Oklahoma	4.312	3	ml
2018-03-10T20:37:25.500Z	36.8425	-98.2396	14km NE of Cherokee, Oklahoma	6.311	3	ml
2018-03-09T20:32:47.300Z	36.4891	-97.7531	15km NE of Enid, Oklahoma	5.715	3.1	ml
2018-03-09T06:16:45.500Z	36.4509	-98.7673	32km NW of Fairview, Oklahoma	7.245	3.6	ml
2018-03-08T10:48:21.430Z	38.0535	-97.9539	2km WSW of Hutchinson, Kansas	10.63	3.4	mb_lg
2018-03-06T19:46:12.700Z	36.9111	-98.328	17km N of Cherokee, Oklahoma	7.743	3.8	mwr
2018-03-05T06:35:19.600Z	36.4845	-97.7621	14km NE of Enid, Oklahoma	8.209	3	ml
2018-03-05T03:40:59.200Z	36.4833	-97.7491	15km NE of Enid, Oklahoma	8.229	4.2	mwr
2018-03-04T23:17:17.400Z	36.478	-97.7411	15km NE of Enid, Oklahoma	8.103	4.2	mwr
2018-03-01T20:26:59.230Z	38.042	-97.9875	4km WNW of South Hutchinson, Kansas	5	3.1	mb_lg
2018-03-01T05:10:47.800Z	35.6888	-97.3051	10km WNW of Luther, Oklahoma	5.248	3.7	ml
2018-02-26T07:46:25.700Z	36.2086	-97.4246	15km SW of Perry, Oklahoma	8	3	ml
2018-02-25T08:04:52.200Z	36.7557	-97.5248	19km ESE of Medford, Oklahoma	8.174	3	ml
2018-02-24T21:06:51.300Z	36.4519	-98.771	33km NW of Fairview, Oklahoma	8.133	3.3	ml
2018-02-24T11:55:45.300Z	36.913	-97.6509	13km SSW of Caldwell, Kansas	7.686	3.6	ml
2018-02-22T09:54:50.400Z	36.2298	-97.3408	8km SW of Perry, Oklahoma	8.201	3.1	ml
2018-02-21T00:18:36.900Z	36.1239	-97.8153	7km ENE of Hennessey, Oklahoma	7.394	3.4	ml
2018-02-18T04:44:48.600Z	35.7914	-98.5748	15km WSW of Watonga, Oklahoma	2.281	3.2	ml
2018-02-16T23:08:35.200Z	35.6892	-97.3031	10km WNW of Luther, Oklahoma	5.568	3.2	ml
2018-02-16T15:53:06.900Z	36.9554	-99.3476	28km ENE of Buffalo, Oklahoma	2.882	3.1	ml
2018-02-16T13:21:09.000Z	36.5336	-98.9685	23km ENE of Mooreland, Oklahoma	6.904	3.7	mwr
2018-02-16T07:16:06.300Z	36.5355	-98.9648	24km ENE of Mooreland, Oklahoma	6.753	3.4	ml
2018-02-13T03:34:37.000Z	36.0361	-97.9017	8km S of Hennessey, Oklahoma	4.599	3.2	ml
2018-02-11T11:40:26.200Z	36.033	-97.9069	8km S of Hennessey, Oklahoma	5.911	3.5	ml
2018-02-08T13:20:32.600Z	36.0363	-97.9003	8km S of Hennessey, Oklahoma	5.146	3	ml
2018-02-08T12:28:55.800Z	36.0415	-97.8949	7km S of Hennessey, Oklahoma	3.768	3	ml
2018-02-07T16:12:55.000Z	36.0403	-97.8983	7km S of Hennessey, Oklahoma	3.648	3.2	ml
2018-02-07T11:11:47.550Z	37.2033	-97.816	19km ENE of Anthony, Kansas	5.65	3.1	ml
2018-02-05T08:25:39.400Z	36.0355	-97.9032	8km S of Hennessey, Oklahoma	6.871	3.2	mwr
2018-02-05T08:20:51.700Z	36.0325	-97.906	8km S of Hennessey, Oklahoma	6.411	3.7	mwr
2018-02-04T09:39:36.400Z	34.6722	-97.4959	18km SSW of Maysville, Oklahoma	4.425	3.2	ml
2018-01-28T20:09:25.100Z	36.8544	-97.4305	14km WNW of Blackwell, Oklahoma	5	3	ml
2018-01-23T06:42:16.700Z	36.9542	-97.3656	18km NNW of Blackwell, Oklahoma	7.988	3	ml
2018-01-23T06:33:23.900Z	36.9551	-97.3628	18km NNW of Blackwell, Oklahoma	8.029	3	ml
2018-01-22T10:45:33.300Z	36.153	-97.661	21km ENE of Hennessey, Oklahoma	6.647	3.6	ml
2018-01-21T17:26:48.200Z	36.459	-98.8168	34km E of Mooreland, Oklahoma	6.01	3	ml
2018-01-16T05:03:11.900Z	36.1229	-97.8083	8km E of Hennessey, Oklahoma	5	3.1	ml
2018-01-13T01:04:08.100Z	35.6711	-97.4005	7km ENE of Edmond, Oklahoma	6.396	3.6	ml
2018-01-12T08:41:40.200Z	36.876	-97.442	16km WNW of Blackwell, Oklahoma	7.578	3.1	ml
2018-01-07T10:55:39.550Z	35.1145	-95.8344	20km NNW of McAlester, Oklahoma	5	3.1	ml
2018-01-03T04:00:29.800Z	36.1603	-98.377	7km NW of Okeene, Oklahoma	5.667	3.4	ml
2018-01-02T17:43:49.200Z	36.1523	-97.6696	21km ENE of Hennessey, Oklahoma	4.492	3.5	ml
2017-12-31T19:09:31.700Z	36.1511	-97.6653	21km ENE of Hennessey, Oklahoma	6.059	3.2	ml
2017-12-30T04:13:24.200Z	36.7203	-99.3909	24km ESE of Buffalo, Oklahoma	6.216	3.2	ml
2017-12-29T04:45:00.000Z	36.1543	-97.671	21km ENE of Hennessey, Oklahoma	5.644	3.8	mwr
2017-12-28T20:11:14.100Z	35.4215	-97.024	6km ESE of McLoud, Oklahoma	5.133	3.7	ml
2017-12-21T08:05:26.300Z	35.8917	-97.2867	6km SSW of Langston, Oklahoma	6.946	3.1	ml
2017-12-21T04:22:24.600Z	35.8931	-97.2909	6km SSW of Langston, Oklahoma	7.171	3.5	ml
2017-12-20T06:00:02.200Z	36.15	-97.6687	21km ENE of Hennessey, Oklahoma	5.047	3.5	ml
2017-12-19T23:58:02.500Z	36.1513	-97.6721	20km ENE of Hennessey, Oklahoma	5	3	ml

Table 2-3 - Revision 0
Historical Earthquakes in Oklahoma
Greater than 3.0 Magnitude
(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2017-12-19T16:57:27.300Z	36.153	-97.6706	21km ENE of Hennessey, Oklahoma	5	3.2	ml
2017-12-19T15:47:46.800Z	36.1542	-97.669	21km ENE of Hennessey, Oklahoma	4.5	3.2	ml
2017-12-19T14:33:03.800Z	34.9544	-97.8208	9km E of Ninnekah, Oklahoma	6.366	3	ml
2017-12-19T11:26:19.200Z	36.5457	-98.9637	24km ENE of Mooreland, Oklahoma	5	3.8	mwr
2017-12-18T13:47:21.100Z	35.8904	-97.2816	6km SSW of Langston, Oklahoma	5.755	3	ml
2017-12-16T13:38:16.500Z	35.889	-97.2831	6km SSW of Langston, Oklahoma	5.92	3	ml
2017-12-15T11:41:22.800Z	36.5118	-98.6412	30km NNW of Fairview, Oklahoma	5	3.1	ml
2017-12-15T08:18:58.400Z	35.7956	-96.9594	12km NW of Chandler, Oklahoma	7.097	3	ml
2017-12-14T16:35:38.690Z	37.2027	-97.812	20km ENE of Anthony, Kansas	5.57	3	ml
2017-12-14T16:29:21.660Z	37.2013	-97.812	20km ENE of Anthony, Kansas	4.52	3	ml
2017-12-10T12:02:45.100Z	36.7016	-98.4297	8km SW of Cherokee, Oklahoma	5	3.5	ml
2017-12-10T11:50:46.900Z	36.5034	-98.4645	18km WSW of Helena, Oklahoma	6.45	3.3	ml
2017-12-06T17:46:00.100Z	36.1543	-97.4844	23km SW of Perry, Oklahoma	7.568	3.2	ml
2017-12-05T04:26:38.200Z	36.3699	-97.1259	17km ENE of Perry, Oklahoma	6.706	4.1	mwr
2017-12-05T00:31:59.600Z	36.5837	-98.5266	23km W of Helena, Oklahoma	3.432	3	ml
2017-12-01T22:05:07.100Z	36.0121	-97.9287	11km SSW of Hennessey, Oklahoma	4.7	3.1	ml
2017-12-01T02:44:03.400Z	36.6396	-99.1881	22km N of Mooreland, Oklahoma	3.401	3	ml
2017-11-26T21:11:51.000Z	36.1069	-97.8283	6km E of Hennessey, Oklahoma	6.266	3.4	ml
2017-11-21T14:04:39.500Z	34.8772	-97.6821	8km WNW of Lindsay, Oklahoma	2.363	3	ml
2017-11-20T05:55:38.900Z	36.0179	-97.3284	10km NW of Langston, Oklahoma	6.031	3.2	ml
2017-11-19T08:20:31.500Z	35.6697	-97.391	8km ENE of Edmond, Oklahoma	6.031	3	ml
2017-11-19T08:12:50.900Z	35.6704	-97.3933	7km ENE of Edmond, Oklahoma	4.855	3.6	mwr
2017-11-18T18:41:55.900Z	36.1326	-98.9735	10km N of Taloga, Oklahoma	3.83	3.1	ml
2017-11-17T06:48:14.300Z	36.8739	-97.4438	16km WNW of Blackwell, Oklahoma	6.481	3.3	ml
2017-11-16T02:21:40.400Z	36.3675	-98.1585	22km SSE of Helena, Oklahoma	6.498	3.5	ml
2017-11-15T12:32:29.900Z	36.458	-98.7977	35km NW of Fairview, Oklahoma	6.044	3.2	ml
2017-11-09T08:45:12.800Z	36.8999	-97.5166	16km SSE of Caldwell, Kansas	5.909	3.2	ml
2017-11-08T11:47:16.200Z	36.2819	-97.5042	19km W of Perry, Oklahoma	7.338	3.5	mwr
2017-11-07T08:12:03.100Z	36.9172	-97.6473	13km SSW of Caldwell, Kansas	8.43	3.2	ml
2017-11-04T18:17:16.200Z	36.0344	-97.906	8km S of Hennessey, Oklahoma	7.671	3.3	ml
2017-11-04T04:23:32.900Z	36.3167	-96.9693	15km W of Pawnee, Oklahoma	5.944	3	ml
2017-11-04T01:17:10.000Z	36.1538	-97.4815	23km SW of Perry, Oklahoma	7.791	3	ml
2017-11-03T10:26:09.200Z	36.9108	-98.33	17km N of Cherokee, Oklahoma	4.978	3.1	ml
2017-11-02T23:31:31.300Z	36.9075	-98.3337	17km N of Cherokee, Oklahoma	6.589	3.4	ml
2017-11-02T12:59:57.700Z	36.9096	-98.3299	17km N of Cherokee, Oklahoma	9.847	3.7	ml
2017-11-02T12:06:17.300Z	36.0365	-97.9026	8km S of Hennessey, Oklahoma	6.282	3.5	ml
2017-11-02T04:29:24.700Z	36.3672	-98.1587	22km SSE of Helena, Oklahoma	6.518	3.1	ml
2017-11-01T20:54:11.600Z	36.0319	-97.9082	8km S of Hennessey, Oklahoma	6.355	3.7	ml
2017-11-01T13:19:39.300Z	36.0263	-97.9121	9km S of Hennessey, Oklahoma	5.637	3.7	ml
2017-10-31T12:18:13.000Z	36.0343	-97.9055	8km S of Hennessey, Oklahoma	5.823	3.2	ml
2017-10-31T10:30:27.100Z	36.0269	-97.9106	9km S of Hennessey, Oklahoma	5.642	3.3	ml
2017-10-31T10:04:49.700Z	36.0279	-97.9102	9km S of Hennessey, Oklahoma	5.906	3	ml
2017-10-31T09:50:51.400Z	36.0299	-97.9075	8km S of Hennessey, Oklahoma	4.207	3.9	mwr
2017-10-31T07:06:46.300Z	36.0328	-97.9046	8km S of Hennessey, Oklahoma	6.444	3.1	ml
2017-10-30T14:49:48.800Z	36.5046	-98.4681	18km WSW of Helena, Oklahoma	5.698	3.3	ml
2017-10-25T15:17:48.200Z	36.2824	-97.504	19km W of Perry, Oklahoma	7.408	3.1	ml
2017-10-24T01:36:27.400Z	36.0306	-97.9068	8km S of Hennessey, Oklahoma	7.429	3.3	ml
2017-10-21T16:03:47.500Z	36.9603	-97.7125	12km SW of Caldwell, Kansas	5.22	3.3	ml
2017-10-18T17:37:12.800Z	36.9137	-97.6539	13km SSW of Caldwell, Kansas	7.695	3.1	ml
2017-10-16T18:13:33.100Z	36.3059	-98.1882	24km NNE of Okeene, Oklahoma	7.199	3	ml
2017-10-13T17:52:42.600Z	36.843	-99.7192	7km W of Buffalo, Oklahoma	4.033	3	ml
2017-10-12T14:46:31.400Z	35.5993	-97.408	8km SE of Edmond, Oklahoma	4.791	3.3	ml
2017-10-11T23:29:06.460Z	37.3475	-98.1347	11km NW of Harper, Kansas	3.23	3.1	mb_lg
2017-10-05T17:43:16.800Z	36.4575	-98.8179	34km E of Mooreland, Oklahoma	6.605	3	ml
2017-10-05T02:26:01.200Z	36.4538	-98.7737	33km NW of Fairview, Oklahoma	8.342	3	ml
2017-10-05T00:12:01.000Z	36.4554	-98.7686	33km NW of Fairview, Oklahoma	8.187	3.3	mwr
2017-10-04T22:06:43.600Z	36.4583	-98.7619	32km NW of Fairview, Oklahoma	7.701	3.2	mwr
2017-10-01T19:43:43.900Z	36.204	-97.4235	15km SW of Perry, Oklahoma	8.03	3.3	ml
2017-10-01T05:48:37.200Z	36.4575	-98.7747	33km NW of Fairview, Oklahoma	6.167	3.5	ml
2017-09-28T04:56:33.800Z	35.9915	-96.8025	3km WNW of Cushing, Oklahoma	5.225	3	ml
2017-09-28T03:56:54.050Z	37.3582	-98.1499	13km NW of Harper, Kansas	5	3.2	mb_lg
2017-09-24T01:11:37.500Z	36.3711	-97.125	17km ENE of Perry, Oklahoma	6.683	3.8	mwr
2017-09-20T06:02:18.600Z	35.5634	-96.7377	9km NNW of Prague, Oklahoma	5	3	ml

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Preparer: D. Horne; Date: 02/15/21
Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2017-09-19T22:21:38.100Z	36.4583	-98.7977	35km NW of Fairview, Oklahoma	6.167	3.4	ml
2017-09-19T22:17:53.700Z	36.4573	-98.7991	35km NW of Fairview, Oklahoma	5.377	3.1	ml
2017-09-19T09:43:49.500Z	35.9907	-96.799	2km WNW of Cushing, Oklahoma	5.628	3.3	ml
2017-09-17T18:53:00.700Z	35.7926	-96.9842	13km NW of Chandler, Oklahoma	6.254	3.5	ml
2017-09-16T23:26:58.400Z	35.8609	-96.6861	12km NNW of Stroud, Oklahoma	6.664	3.8	mwr
2017-09-15T13:04:52.500Z	37.2798	-97.9665	5km E of Harper, Kansas	4.9	3	ml
2017-09-14T19:10:48.700Z	36.291	-97.5125	20km W of Perry, Oklahoma	7.742	3.4	ml
2017-09-14T05:49:37.800Z	36.7402	-98.3656	1km SSW of Cherokee, Oklahoma	7.992	3	ml
2017-09-14T04:14:41.080Z	37.2788	-97.9675	5km E of Harper, Kansas	4.96	3.4	ml
2017-09-14T03:40:29.600Z	36.2876	-97.5079	19km W of Perry, Oklahoma	7.302	3.3	ml
2017-09-12T20:10:25.500Z	36.7404	-98.368	1km SSW of Cherokee, Oklahoma	7.519	3	ml
2017-09-11T03:27:05.300Z	35.5637	-96.7392	9km NNW of Prague, Oklahoma	5	3.6	mwr
2017-09-10T07:13:56.400Z	35.9918	-96.804	3km WNW of Cushing, Oklahoma	5.961	3.3	ml
2017-09-09T20:47:50.700Z	35.9914	-96.8015	3km WNW of Cushing, Oklahoma	5.85	3.1	ml
2017-09-09T11:34:55.100Z	36.641	-97.7026	18km S of Medford, Oklahoma	8.008	3	ml
2017-09-08T22:28:21.800Z	36.2872	-97.5069	19km W of Perry, Oklahoma	6.887	3	ml
2017-09-08T02:26:23.700Z	36.6996	-97.683	12km SSE of Medford, Oklahoma	6.073	4.3	mwr
2017-09-06T03:20:54.700Z	36.1711	-96.9168	14km ENE of Stillwater, Oklahoma	7.233	3.3	ml
2017-09-04T23:03:01.300Z	35.6618	-97.183	1km E of Luther, Oklahoma	5.179	3.7	ml
2017-08-31T07:21:16.520Z	37.5587	-97.7708	7km S of Cheney, Kansas	4.68	3.4	mb_lg
2017-08-30T00:43:56.500Z	36.9357	-97.8898	19km NW of Medford, Oklahoma	4.726	3	ml
2017-08-29T17:23:52.000Z	36.6135	-98.4002	13km WNW of Helena, Oklahoma	5.888	3.5	ml
2017-08-28T16:16:17.500Z	36.2837	-97.5043	19km W of Perry, Oklahoma	6.583	3.4	ml
2017-08-27T21:24:42.590Z	35.7871	-98.566	15km WSW of Watonga, Oklahoma	8.47	3.5	mb_lg
2017-08-27T15:01:15.740Z	37.2495	-97.565	17km W of Wellington, Kansas	4.53	3	ml
2017-08-25T18:52:44.780Z	36.3583	-98.2003	21km SSE of Helena, Oklahoma	5	3.2	mb_lg
2017-08-25T16:16:47.900Z	36.3621	-98.1982	21km SSE of Helena, Oklahoma	7.176	3	ml
2017-08-25T11:50:01.800Z	36.9374	-97.885	19km NW of Medford, Oklahoma	5.368	3.1	ml
2017-08-23T22:45:06.700Z	35.9808	-97.1979	6km NE of Langston, Oklahoma	7.199	3.2	ml
2017-08-23T18:03:54.500Z	35.677	-97.4139	6km ENE of Edmond, Oklahoma	5.725	3.6	ml
2017-08-20T18:49:55.400Z	35.8636	-96.6837	12km N of Stroud, Oklahoma	6.6	3.1	ml
2017-08-17T03:52:32.000Z	36.1238	-97.8157	7km ENE of Hennessey, Oklahoma	6.958	3.3	mwr
2017-08-15T17:13:16.110Z	36.9692	-99.3456	29km ENE of Buffalo, Oklahoma	5	3.1	mb_lg
2017-08-15T17:05:10.710Z	36.9789	-99.3658	28km NE of Buffalo, Oklahoma	5	3.1	mb_lg
2017-08-14T01:06:52.100Z	36.4583	-98.7745	33km NW of Fairview, Oklahoma	6.239	3	ml
2017-08-12T08:51:13.700Z	36.4571	-98.7807	34km NW of Fairview, Oklahoma	6.46	3	mb_lg
2017-08-09T21:15:30.940Z	37.127	-97.6132	10km N of Caldwell, Kansas	6.08	3.7	mwr
2017-08-09T07:13:36.520Z	36.2333	-98.4083	7km ESE of Fairview, Oklahoma	5	3.2	mb_lg
2017-08-06T02:38:02.370Z	37.2757	-97.618	12km S of Conway Springs, Kansas	4.46	3	ml
2017-08-05T20:13:00.710Z	37.271	-97.6243	13km S of Conway Springs, Kansas	2.94	3.4	ml
2017-08-05T03:32:52.030Z	37.1248	-97.615	10km N of Caldwell, Kansas	4.11	3.4	ml
2017-08-05T03:14:10.290Z	37.1268	-97.6168	10km N of Caldwell, Kansas	4.15	3.2	ml
2017-08-03T16:11:46.400Z	35.6733	-97.4071	6km ENE of Edmond, Oklahoma	5.427	3.5	ml
2017-08-03T14:50:09.400Z	35.8639	-96.6759	12km N of Stroud, Oklahoma	6.432	3.5	ml
2017-08-03T11:05:40.800Z	35.8352	-97.391	5km SSE of Guthrie, Oklahoma	6.034	3.1	ml
2017-08-03T06:40:44.100Z	35.6745	-97.403	7km ENE of Edmond, Oklahoma	5.767	3.3	mwr
2017-08-03T04:37:59.200Z	36.4554	-98.7938	34km NW of Fairview, Oklahoma	6.599	3.3	ml
2017-08-03T04:33:51.900Z	36.4564	-98.795	35km NW of Fairview, Oklahoma	6.503	3.2	ml
2017-08-03T02:56:37.300Z	35.672	-97.4047	6km ENE of Edmond, Oklahoma	5.031	4.2	mwr
2017-08-02T22:16:37.700Z	35.6717	-97.4056	6km ENE of Edmond, Oklahoma	6.271	3	ml
2017-08-02T20:45:26.900Z	35.6704	-97.4038	7km ENE of Edmond, Oklahoma	6.477	3.3	ml
2017-08-02T07:49:32.800Z	35.6703	-97.4039	6km ENE of Edmond, Oklahoma	6.391	3.3	ml
2017-08-02T05:18:52.400Z	35.673	-97.4057	6km ENE of Edmond, Oklahoma	6.785	3.3	mwr
2017-08-02T02:42:17.800Z	35.669	-97.3985	7km ENE of Edmond, Oklahoma	6.698	3	ml
2017-08-01T19:43:48.460Z	36.5374	-98.9612	24km ENE of Mooreland, Oklahoma	9.96	3.1	mwr
2017-08-01T07:42:22.100Z	36.4562	-98.8023	35km NW of Fairview, Oklahoma	6.446	3.1	ml
2017-08-01T06:25:12.600Z	37.1282	-97.6122	10km N of Caldwell, Kansas	3.79	3.3	ml
2017-07-30T00:13:45.470Z	38.0255	-98.0035	5km W of South Hutchinson, Kansas	3.6	3	mb_lg
2017-07-23T17:11:23.900Z	36.7494	-98.0416	28km E of Cherokee, Oklahoma	7.302	3.3	ml
2017-07-21T12:52:38.400Z	35.7986	-96.6506	5km N of Stroud, Oklahoma	6.198	3.3	ml
2017-07-21T11:58:59.900Z	36.9766	-99.3847	26km NE of Buffalo, Oklahoma	7.328	3.1	ml
2017-07-19T00:20:05.300Z	36.0399	-97.1245	10km SW of Stillwater, Oklahoma	6.381	3.2	mwr
2017-07-18T21:59:51.300Z	35.8642	-96.6838	13km N of Stroud, Oklahoma	6.363	3.2	ml

Table 2-3 - Revision 0
Historical Earthquakes in Oklahoma
Greater than 3.0 Magnitude
(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2017-07-18T02:32:29.600Z	36.6176	-98.4197	15km WNW of Helena, Oklahoma	4.997	3.6	ml
2017-07-17T21:06:34.200Z	36.4454	-97.0626	25km S of McCord, Oklahoma	5.966	3.3	ml
2017-07-17T03:51:18.700Z	35.8628	-96.6819	12km N of Stroud, Oklahoma	6.806	3.2	ml
2017-07-17T03:29:22.090Z	36.247	-98.4382	4km ESE of Fairview, Oklahoma	2.16	3.2	mb_lg
2017-07-15T23:11:24.290Z	35.8595	-96.6881	12km NNW of Stroud, Oklahoma	3.3	3	mb_lg
2017-07-14T15:11:32.300Z	36.0361	-97.9013	8km S of Hennessey, Oklahoma	4.504	3	ml
2017-07-14T15:04:22.000Z	35.86	-96.6992	12km NNW of Stroud, Oklahoma	5	3.4	ml
2017-07-14T14:17:50.800Z	35.861	-96.6822	12km N of Stroud, Oklahoma	7.052	3.6	mwr
2017-07-14T14:04:50.900Z	35.862	-96.6857	12km N of Stroud, Oklahoma	6.831	3.5	mwr
2017-07-14T13:47:35.300Z	35.8591	-96.6833	12km N of Stroud, Oklahoma	6.813	4.2	mwr
2017-07-13T03:16:56.120Z	36.2834	-97.5074	19km W of Perry, Oklahoma	3.26	3.3	mwr
2017-07-11T17:22:25.610Z	37.2315	-97.972	7km SE of Harper, Kansas	5.16	3.5	ml
2017-07-11T08:37:34.500Z	36.3026	-96.6712	12km ESE of Pawnee, Oklahoma	2.986	3	ml
2017-07-09T08:59:43.140Z	36.1119	-98.7234	23km ENE of Taloga, Oklahoma	5.27	3	mb_lg
2017-07-08T02:51:23.680Z	36.3009	-96.6908	10km ESE of Pawnee, Oklahoma	7.29	3.4	mb_lg
2017-07-06T15:22:11.700Z	36.7659	-97.7631	5km SSW of Medford, Oklahoma	6.031	3.1	mwr
2017-07-01T11:50:26.910Z	36.6789	-98.157	17km NE of Helena, Oklahoma	5	3.1	mb_lg
2017-06-30T22:49:07.410Z	36.0076	-97.2371	7km NNE of Langston, Oklahoma	3.61	3.2	mb_lg
2017-06-29T11:31:54.900Z	36.533	-98.9667	23km ENE of Mooreland, Oklahoma	6.431	3.5	ml
2017-06-27T06:07:54.920Z	36.4723	-97.2848	20km N of Perry, Oklahoma	5	3.3	mb_lg
2017-06-22T12:44:51.170Z	37.2295	-97.9742	7km SE of Harper, Kansas	4.37	3.7	ml
2017-06-20T22:14:57.610Z	37.2747	-98.13	9km W of Harper, Kansas	3.06	3.1	mb_lg
2017-06-19T18:10:57.600Z	35.6176	-96.8946	9km S of Chandler, Oklahoma	5	3	ml
2017-06-17T12:06:27.750Z	35.012	-97.5951	15km SSE of Blanchard, Oklahoma	5.77	3.2	mb_lg
2017-06-15T07:35:15.300Z	36.2848	-97.5067	19km W of Perry, Oklahoma	6.133	3.3	mwr
2017-06-10T07:01:46.360Z	36.4373	-98.7528	30km NW of Fairview, Oklahoma	2.93	3.4	mwr
2017-06-10T06:26:10.890Z	37.2345	-97.9848	6km SSE of Harper, Kansas	3.78	3.7	ml
2017-06-09T12:25:29.300Z	35.6372	-98.0396	11km SSW of Okarche, Oklahoma	6.85	3.2	ml
2017-06-09T12:23:51.200Z	36.6087	-97.7451	22km S of Medford, Oklahoma	6.887	3.1	ml
2017-06-08T03:09:37.100Z	36.871	-98.8188	15km WNW of Alva, Oklahoma	4.202	3.1	mwr
2017-06-07T16:41:18.000Z	36.2274	-98.4308	6km SE of Fairview, Oklahoma	6.153	3.2	mwr
2017-06-07T02:54:34.800Z	36.4584	-98.795	35km NW of Fairview, Oklahoma	5.65	3.1	mwr
2017-06-04T18:08:12.200Z	35.6811	-97.1817	2km NNE of Luther, Oklahoma	4.744	3	ml
2017-06-02T14:02:22.400Z	36.6987	-97.6707	13km SSE of Medford, Oklahoma	5.646	3.1	ml
2017-06-01T21:55:09.700Z	36.4715	-98.7472	32km NW of Fairview, Oklahoma	7.959	3.1	ml
2017-06-01T21:06:08.100Z	36.4569	-98.7903	34km NW of Fairview, Oklahoma	5.108	3.5	ml
2017-06-01T18:26:39.740Z	37.2347	-97.9817	6km SE of Harper, Kansas	4.59	3.6	ml
2017-05-31T23:20:51.700Z	36.4562	-98.7973	35km NW of Fairview, Oklahoma	6.12	3.1	ml
2017-05-31T20:05:29.700Z	36.6999	-98.427	8km SW of Cherokee, Oklahoma	4.867	3.2	ml
2017-05-31T07:03:47.800Z	36.4032	-96.8796	9km NW of Pawnee, Oklahoma	5	3.1	mwr
2017-05-30T23:12:22.800Z	36.2809	-97.5051	19km W of Perry, Oklahoma	6.718	3.8	mwr
2017-05-30T17:50:11.400Z	36.4559	-98.8021	35km NW of Fairview, Oklahoma	6.434	3	ml
2017-05-30T13:57:24.000Z	36.2826	-97.5071	19km W of Perry, Oklahoma	5.525	3.7	mwr
2017-05-30T09:23:14.900Z	36.4575	-98.7966	35km NW of Fairview, Oklahoma	5.855	3	mwr
2017-05-29T01:28:05.500Z	36.2168	-98.9332	19km N of Taloga, Oklahoma	3.001	3.1	ml
2017-05-26T10:48:12.100Z	35.84	-96.6911	10km NNW of Stroud, Oklahoma	6.438	3.1	ml
2017-05-25T16:31:15.700Z	35.2678	-97.8648	5km WSW of Tuttle, Oklahoma	7.208	3.2	ml
2017-05-24T03:47:34.700Z	36.5319	-98.9705	23km ENE of Mooreland, Oklahoma	7.204	3.1	ml
2017-05-21T14:06:15.600Z	35.796	-97.2005	14km N of Luther, Oklahoma	7.058	3.3	mwr
2017-05-20T19:25:17.500Z	35.874	-96.64	13km SSW of Drumright, Oklahoma	5.542	3.1	ml
2017-05-19T07:32:49.590Z	37.235	-97.9828	6km SSE of Harper, Kansas	4.39	3.4	ml
2017-05-19T01:04:05.200Z	36.8677	-98.8225	15km WNW of Alva, Oklahoma	4.355	3.2	ml
2017-05-16T11:29:12.600Z	36.6998	-98.4305	8km SW of Cherokee, Oklahoma	6.904	3.7	ml
2017-05-15T02:46:39.200Z	35.6178	-96.8917	9km S of Chandler, Oklahoma	5	3.2	ml
2017-05-13T21:59:29.400Z	36.6998	-98.4312	9km SW of Cherokee, Oklahoma	5.53	3.2	ml
2017-05-13T13:55:05.200Z	36.4771	-98.7385	32km NW of Fairview, Oklahoma	5.794	3.2	ml
2017-05-13T09:06:47.600Z	36.4801	-98.7407	33km NW of Fairview, Oklahoma	6.439	3	ml
2017-05-13T08:32:37.300Z	36.4782	-98.7365	32km NW of Fairview, Oklahoma	5.367	4.2	mwr
2017-05-13T08:20:49.000Z	36.4617	-98.7521	32km NW of Fairview, Oklahoma	5	3	ml
2017-05-12T17:54:35.300Z	36.4561	-98.7885	34km NW of Fairview, Oklahoma	5.269	3.4	ml
2017-05-12T16:37:04.800Z	36.4562	-98.7888	34km NW of Fairview, Oklahoma	5.832	3.6	ml
2017-05-12T13:15:15.400Z	36.4566	-98.7929	34km NW of Fairview, Oklahoma	5.57	3.2	ml
2017-05-09T14:30:05.100Z	36.6019	-97.6111	25km SSE of Medford, Oklahoma	7.987	3.4	ml

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(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2017-05-07T21:39:53.500Z	36.9197	-98.1299	27km SSW of Anthony, Kansas	7.514	3	ml
2017-05-07T21:08:21.100Z	36.9182	-98.1294	27km SSW of Anthony, Kansas	8.274	3.3	ml
2017-05-07T17:01:14.600Z	36.9202	-98.1295	27km SSW of Anthony, Kansas	9.898	3	ml
2017-05-07T16:52:07.400Z	36.6013	-97.6169	25km SSE of Medford, Oklahoma	6.359	3.2	ml
2017-05-05T11:21:07.600Z	36.2183	-97.5683	26km WSW of Perry, Oklahoma	6.602	3	ml
2017-05-04T23:36:47.950Z	37.2278	-97.8698	15km ESE of Harper, Kansas	4.28	3.7	ml
2017-05-04T23:33:09.000Z	35.7936	-97.1923	14km N of Luther, Oklahoma	5.502	3.1	ml
2017-04-29T09:48:15.500Z	36.6999	-97.6698	13km SSE of Medford, Oklahoma	8.594	3.3	mwr
2017-04-28T01:40:56.500Z	36.4613	-98.7675	33km NW of Fairview, Oklahoma	4.806	3.2	ml
2017-04-28T01:23:47.600Z	35.7991	-96.6522	5km N of Stroud, Oklahoma	7.112	3	ml
2017-04-26T16:29:12.900Z	36.698	-97.6711	13km SSE of Medford, Oklahoma	6.452	3	ml
2017-04-26T00:46:30.600Z	36.4763	-98.7432	32km NW of Fairview, Oklahoma	8.292	3	ml
2017-04-25T20:16:14.700Z	35.5926	-97.3733	7km N of Spencer, Oklahoma	4.606	3.3	ml
2017-04-25T12:40:25.200Z	36.8214	-97.776	4km WNW of Medford, Oklahoma	1.129	3	ml
2017-04-25T07:57:12.100Z	35.5902	-97.3731	7km N of Spencer, Oklahoma	5.187	3	ml
2017-04-24T22:13:34.700Z	36.7908	-98.2712	8km ENE of Cherokee, Oklahoma	3.377	3.3	ml
2017-04-22T14:54:51.500Z	36.7037	-97.6681	12km SSE of Medford, Oklahoma	8.292	3.6	ml
2017-04-22T14:47:22.000Z	36.7033	-97.67	12km SSE of Medford, Oklahoma	6.009	3	ml
2017-04-20T13:38:14.600Z	36.3613	-98.1568	22km SSE of Helena, Oklahoma	4.868	3.2	ml
2017-04-20T04:33:06.500Z	36.7002	-97.6673	13km SSE of Medford, Oklahoma	7.984	3.1	ml
2017-04-18T13:27:30.800Z	36.2082	-97.4265	15km SW of Perry, Oklahoma	8.009	3	ml
2017-04-18T04:36:28.500Z	36.4315	-96.9094	14km NW of Pawnee, Oklahoma	4.183	3	ml
2017-04-16T09:57:04.100Z	36.2071	-97.4255	15km SW of Perry, Oklahoma	6.468	3.1	ml
2017-04-16T06:29:30.500Z	36.2055	-97.4246	15km SW of Perry, Oklahoma	8.094	3.5	ml
2017-04-13T11:32:37.400Z	36.7013	-97.6729	12km SSE of Medford, Oklahoma	8.595	3.1	ml
2017-04-13T10:36:27.900Z	36.7015	-97.6705	12km SSE of Medford, Oklahoma	9.879	3.2	mwr
2017-04-09T22:08:54.600Z	36.919	-98.1266	27km SSW of Anthony, Kansas	8.102	3	ml
2017-04-09T01:47:31.900Z	36.214	-97.014	11km NNE of Stillwater, Oklahoma	7.269	3.4	mwr
2017-04-07T14:56:33.000Z	36.4453	-98.7923	34km NW of Fairview, Oklahoma	6.222	3	ml
2017-04-07T10:13:27.400Z	36.4418	-98.7823	33km NW of Fairview, Oklahoma	7.591	3.1	ml
2017-04-07T08:01:09.500Z	36.5327	-98.971	23km ENE of Mooreland, Oklahoma	6.061	3.2	ml
2017-04-05T19:58:28.000Z	36.419	-96.9144	13km NW of Pawnee, Oklahoma	5.282	3	ml
2017-04-05T08:14:35.700Z	36.5069	-98.238	5km SSE of Helena, Oklahoma	7.572	3.3	ml
2017-04-05T00:09:49.100Z	35.9867	-97.1955	7km NE of Langston, Oklahoma	7.562	3.3	ml
2017-04-04T23:49:52.400Z	35.9885	-97.1934	7km NE of Langston, Oklahoma	7.515	3.5	ml
2017-04-02T08:10:12.300Z	36.8363	-98.2782	11km NE of Cherokee, Oklahoma	5.963	3	ml
2017-03-29T15:37:40.700Z	36.815	-97.6114	10km E of Medford, Oklahoma	2.767	4.1	mwr
2017-03-28T04:25:25.700Z	36.1239	-98.7321	22km ENE of Taloga, Oklahoma	5.552	3	ml
2017-03-25T20:38:44.300Z	36.6835	-97.757	13km S of Medford, Oklahoma	8.301	3.8	mwr
2017-03-25T11:44:13.600Z	36.2746	-97.5636	24km W of Perry, Oklahoma	6.343	3	ml
2017-03-25T11:33:12.400Z	36.2751	-97.5659	25km W of Perry, Oklahoma	6.72	3.1	ml
2017-03-25T11:05:34.400Z	36.2757	-97.5625	24km W of Perry, Oklahoma	7.29	3.6	ml
2017-03-24T16:55:34.900Z	36.137	-97.8224	7km ENE of Hennessey, Oklahoma	5.655	3.6	ml
2017-03-24T04:50:58.400Z	35.7279	-97.1494	8km NNE of Luther, Oklahoma	5.666	3.1	ml
2017-03-22T14:00:09.100Z	35.8537	-96.6512	11km N of Stroud, Oklahoma	4.708	3.7	mwr
2017-03-20T18:47:13.000Z	36.9185	-98.129	27km SSW of Anthony, Kansas	10.186	3.1	ml
2017-03-16T08:57:59.600Z	36.7011	-98.4288	8km SW of Cherokee, Oklahoma	6.118	3.8	ml
2017-03-15T19:14:35.200Z	35.9008	-98.2878	12km ENE of Watonga, Oklahoma	6.871	3.4	ml
2017-03-15T15:16:47.500Z	36.4008	-96.8841	10km NW of Pawnee, Oklahoma	5	3.5	ml
2017-03-15T04:51:56.200Z	36.4185	-98.1339	18km SE of Helena, Oklahoma	7.929	3.1	ml
2017-03-09T23:49:28.120Z	37.073	-97.983	9km SSE of Anthony, Kansas	7.53	3.2	ml
2017-03-08T22:30:20.800Z	36.4918	-98.8963	28km ENE of Mooreland, Oklahoma	5.196	3.8	ml
2017-03-07T20:51:27.400Z	36.4227	-96.9155	13km NW of Pawnee, Oklahoma	5.513	3	ml
2017-03-07T16:06:01.200Z	36.6997	-97.6783	12km SSE of Medford, Oklahoma	8.147	3.2	mwr
2017-03-07T16:03:09.400Z	36.6993	-97.6804	12km SSE of Medford, Oklahoma	7.988	3.3	ml
2017-03-05T12:09:16.200Z	35.8996	-98.2899	12km ENE of Watonga, Oklahoma	5	3.2	ml
2017-03-04T16:08:38.100Z	35.6692	-97.3932	7km ENE of Edmond, Oklahoma	6.825	3	ml
2017-03-03T02:38:27.000Z	36.6646	-99.1271	25km NNE of Mooreland, Oklahoma	5.832	3.3	ml
2017-03-02T20:27:29.000Z	36.5278	-98.9756	22km ENE of Mooreland, Oklahoma	6.208	3.5	ml
2017-03-02T16:43:39.800Z	36.5359	-98.9643	24km ENE of Mooreland, Oklahoma	5.741	3.3	ml
2017-03-02T00:30:40.600Z	35.8428	-96.6459	10km N of Stroud, Oklahoma	5.952	3.3	ml
2017-03-01T19:49:55.300Z	36.4829	-98.763	34km NW of Fairview, Oklahoma	4.768	3.1	ml
2017-03-01T05:25:22.600Z	36.4434	-98.7855	33km NW of Fairview, Oklahoma	7.462	3.4	ml

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Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2017-02-25T17:31:02.000Z	36.2145	-97.5568	25km WSW of Perry, Oklahoma	7.252	3.4	ml
2017-02-24T18:47:20.100Z	36.4876	-97.7636	14km NE of Enid, Oklahoma	7.457	3	ml
2017-02-22T16:31:46.670Z	37.227	-97.9745	8km SE of Harper, Kansas	4.09	3.4	ml
2017-02-22T08:57:35.400Z	36.7675	-97.6396	9km ESE of Medford, Oklahoma	8.799	3.4	ml
2017-02-21T08:05:41.200Z	36.5339	-98.9738	23km ENE of Mooreland, Oklahoma	6.377	3.1	ml
2017-02-16T15:33:07.300Z	36.1266	-96.864	14km W of Yale, Oklahoma	6.207	3.3	mwr
2017-02-13T21:39:58.870Z	37.0653	-97.3763	20km E of Caldwell, Kansas	7.94	3.3	mb_lg
2017-02-12T17:37:24.900Z	36.298	-96.6798	11km ESE of Pawnee, Oklahoma	3.561	3.1	ml
2017-02-12T16:31:50.100Z	37.3633	-98.1158	11km NW of Harper, Kansas	6.35	3.1	mb_lg
2017-02-11T11:12:19.700Z	36.3599	-98.1599	22km SSE of Helena, Oklahoma	7.955	3.1	ml
2017-02-08T22:20:43.410Z	37.0467	-97.3834	19km E of Caldwell, Kansas	3.62	3	mb_lg
2017-02-08T01:18:41.800Z	36.8736	-98.0954	26km ENE of Cherokee, Oklahoma	5.638	3	ml
2017-02-06T20:53:53.700Z	36.4199	-96.8941	12km NW of Pawnee, Oklahoma	6.287	3.4	ml
2017-02-04T11:19:41.900Z	36.8792	-98.0093	25km WNW of Medford, Oklahoma	7.4	3.2	ml
2017-02-03T15:04:12.400Z	36.5297	-98.9761	22km ENE of Mooreland, Oklahoma	5.982	3.2	ml
2017-02-02T01:58:10.300Z	36.29	-97.5072	19km W of Perry, Oklahoma	3.67	3.2	ml
2017-01-31T19:49:39.220Z	36.5369	-98.9758	23km ENE of Mooreland, Oklahoma	10.09	3	mb_lg
2017-01-30T16:55:33.900Z	36.7918	-97.7296	1km SSE of Medford, Oklahoma	7.934	3	ml
2017-01-30T05:34:21.200Z	36.8704	-97.4489	16km WNW of Blackwell, Oklahoma	3.007	3.1	ml
2017-01-29T23:09:00.000Z	36.6995	-98.4304	8km SW of Cherokee, Oklahoma	6.59	3	ml
2017-01-28T03:54:00.300Z	36.1704	-97.2684	13km S of Perry, Oklahoma	7.993	3	ml
2017-01-27T09:51:17.600Z	36.93	-97.6463	11km SSW of Caldwell, Kansas	6.705	3.2	ml
2017-01-26T12:02:32.000Z	36.3863	-97.701	15km E of Enid, Oklahoma	6.054	3.2	ml
2017-01-25T19:44:15.400Z	36.6684	-97.581	20km SE of Medford, Oklahoma	8.292	3	ml
2017-01-25T03:51:31.500Z	36.271	-97.3808	8km WSW of Perry, Oklahoma	7.971	3.1	ml
2017-01-24T20:20:20.700Z	35.6253	-97.1719	4km SSE of Luther, Oklahoma	5	3	ml
2017-01-23T21:21:08.500Z	36.7658	-98.0675	25km E of Cherokee, Oklahoma	6.589	3.1	ml
2017-01-22T08:21:00.500Z	36.4432	-96.9735	19km NW of Pawnee, Oklahoma	3.94	3	ml
2017-01-19T21:30:04.900Z	36.7629	-98.0624	26km E of Cherokee, Oklahoma	7.678	3.3	ml
2017-01-15T05:19:46.900Z	36.4493	-98.7751	33km NW of Fairview, Oklahoma	7.503	3.4	ml
2017-01-11T21:34:27.500Z	36.5297	-98.98	22km ENE of Mooreland, Oklahoma	6.147	3.1	ml
2017-01-10T06:22:29.600Z	36.4174	-98.1347	18km SE of Helena, Oklahoma	5.866	3.3	ml
2017-01-09T20:39:59.900Z	36.7026	-97.6719	12km SSE of Medford, Oklahoma	7.798	3.2	mwr
2017-01-08T02:02:36.900Z	36.9138	-97.5796	13km S of Caldwell, Kansas	6.624	3	ml
2017-01-05T02:55:34.300Z	35.6703	-97.3995	7km ENE of Edmond, Oklahoma	7.069	3.1	ml
2017-01-02T19:44:23.000Z	36.4199	-96.9186	13km NW of Pawnee, Oklahoma	3.044	3.5	ml
2017-01-02T15:28:40.100Z	36.3961	-96.8858	9km NW of Pawnee, Oklahoma	4.241	3.4	ml
2017-01-02T15:25:35.000Z	36.3968	-96.8859	9km NW of Pawnee, Oklahoma	4.152	3.3	ml
2017-01-01T06:43:01.400Z	36.2856	-97.5017	19km W of Perry, Oklahoma	4.179	3	ml
2016-12-30T20:12:44.900Z	36.2667	-97.3454	5km WSW of Perry, Oklahoma	6.352	3.1	ml
2016-12-29T23:18:54.200Z	35.6733	-97.396	7km ENE of Edmond, Oklahoma	5.717	3.2	ml
2016-12-29T23:18:41.700Z	35.6699	-97.3975	7km ENE of Edmond, Oklahoma	6.68	3	ml
2016-12-28T04:14:22.200Z	36.4444	-98.7774	33km NW of Fairview, Oklahoma	5.147	3.4	ml
2016-12-24T04:08:52.300Z	36.3993	-96.8885	10km NW of Pawnee, Oklahoma	4.53	3.6	ml
2016-12-24T02:24:35.300Z	36.5286	-98.9709	23km ENE of Mooreland, Oklahoma	5.56	3	ml
2016-12-23T21:30:59.200Z	36.5311	-98.9679	23km ENE of Mooreland, Oklahoma	4.537	3.4	ml
2016-12-23T20:45:05.300Z	36.5341	-98.9667	23km ENE of Mooreland, Oklahoma	6.012	3.4	ml
2016-12-22T14:46:56.680Z	37.2285	-97.8685	15km ESE of Harper, Kansas	4.45	3.1	ml
2016-12-22T14:21:44.700Z	35.6705	-97.4011	7km ENE of Edmond, Oklahoma	6.842	3.3	ml
2016-12-22T01:58:57.000Z	36.4457	-98.7749	32km NW of Fairview, Oklahoma	6.072	3	ml
2016-12-20T14:03:07.200Z	36.1717	-96.7699	9km NW of Yale, Oklahoma	4.264	3.2	ml
2016-12-20T09:32:19.400Z	34.6053	-96.2282	7km N of Coalgate, Oklahoma	4.796	3.1	ml
2016-12-20T05:03:26.100Z	36.4445	-98.7802	33km NW of Fairview, Oklahoma	7.45	3.5	ml
2016-12-19T08:29:49.300Z	36.5359	-98.9646	24km ENE of Mooreland, Oklahoma	5.638	3.1	ml
2016-12-18T07:46:29.400Z	36.305	-96.6661	12km ESE of Pawnee, Oklahoma	3.032	3	ml
2016-12-18T05:52:59.800Z	35.6707	-97.3981	7km ENE of Edmond, Oklahoma	6.739	3.7	ml
2016-12-18T01:03:20.000Z	36.3957	-97.3251	12km NNW of Perry, Oklahoma	8.009	3.3	ml
2016-12-17T05:04:30.220Z	37.258	-97.8772	13km ESE of Harper, Kansas	4.59	3	ml
2016-12-16T23:06:32.700Z	36.3888	-96.7362	8km NE of Pawnee, Oklahoma	2.75	3.1	ml
2016-12-14T19:12:42.200Z	36.6713	-97.7342	15km S of Medford, Oklahoma	7.968	3.2	ml
2016-12-12T05:08:17.500Z	36.4516	-98.7747	33km NW of Fairview, Oklahoma	8.162	3.2	ml
2016-12-11T11:53:32.500Z	36.284	-97.5081	19km W of Perry, Oklahoma	6.252	3.2	ml
2016-12-10T18:38:34.900Z	36.5356	-98.9725	23km ENE of Mooreland, Oklahoma	6.907	3.2	ml

Table 2-3 - Revision 0
Historical Earthquakes in Oklahoma
Greater than 3.0 Magnitude
(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2016-12-10T08:07:01.400Z	36.3413	-97.9016	6km SSW of Enid, Oklahoma	6.931	3.4	mwr
2016-12-07T17:39:41.500Z	36.2848	-97.5061	19km W of Perry, Oklahoma	7.244	3	ml
2016-12-06T15:41:37.900Z	36.1202	-96.7023	0km NNW of Yale, Oklahoma	5.011	3.2	mwr
2016-12-05T17:39:11.400Z	36.2567	-97.4697	16km WSW of Perry, Oklahoma	8.533	3.3	ml
2016-12-05T08:58:31.000Z	36.0207	-96.7463	4km NNE of Cushing, Oklahoma	4.194	3.2	mwr
2016-12-05T03:22:55.700Z	36.3077	-96.6617	13km ESE of Pawnee, Oklahoma	3.538	3.8	mwr
2016-11-27T14:34:47.000Z	36.7655	-97.5994	12km ESE of Medford, Oklahoma	7.995	3.6	ml
2016-11-25T15:19:35.700Z	36.8434	-97.7522	4km NNW of Medford, Oklahoma	7.893	4	mb
2016-11-24T16:34:06.600Z	35.9931	-96.7981	2km WNW of Cushing, Oklahoma	5.707	3.6	ml
2016-11-24T08:18:29.600Z	36.214	-96.981	12km NNE of Stillwater, Oklahoma	5.202	3.5	ml
2016-11-22T17:07:30.800Z	36.8438	-97.8332	9km WNW of Medford, Oklahoma	5.151	3	ml
2016-11-22T09:55:33.300Z	36.0066	-96.7687	2km N of Cushing, Oklahoma	4.44	3.5	mwr
2016-11-19T11:38:54.100Z	36.4459	-98.7789	33km NW of Fairview, Oklahoma	6.897	3	ml
2016-11-19T03:05:28.900Z	36.443	-98.7831	33km NW of Fairview, Oklahoma	7.323	3	ml
2016-11-15T12:04:46.400Z	36.2936	-96.6869	11km ESE of Pawnee, Oklahoma	3.637	3	ml
2016-11-14T15:07:38.800Z	36.4522	-98.794	34km NW of Fairview, Oklahoma	5.902	3	ml
2016-11-14T14:41:50.900Z	36.3029	-96.6713	12km ESE of Pawnee, Oklahoma	2.843	3.3	ml
2016-11-14T00:30:00.900Z	36.454	-98.7935	34km NW of Fairview, Oklahoma	6.24	3.1	ml
2016-11-12T16:39:41.100Z	35.9886	-96.8065	3km W of Cushing, Oklahoma	6.012	3.3	ml
2016-11-11T15:49:57.000Z	35.6826	-97.0686	11km ENE of Luther, Oklahoma	6.483	3.3	ml
2016-11-11T11:12:36.400Z	36.9461	-97.891	20km NW of Medford, Oklahoma	6.267	3.3	ml
2016-11-11T08:54:43.400Z	35.5734	-98.1395	17km WNW of El Reno, Oklahoma	6.362	3.4	ml
2016-11-11T00:08:05.200Z	35.9862	-96.8103	3km W of Cushing, Oklahoma	5.334	3.1	ml
2016-11-09T02:15:37.000Z	36.9445	-97.8973	21km NW of Medford, Oklahoma	5.943	3.7	mwr
2016-11-08T20:27:05.500Z	36.4163	-97.3526	15km NNW of Perry, Oklahoma	7.081	3.3	ml
2016-11-07T13:43:17.400Z	36.4723	-98.7498	33km NW of Fairview, Oklahoma	7.638	3.3	ml
2016-11-07T08:46:44.300Z	35.4968	-97.3076	1km ENE of Nicoma Park, Oklahoma	6.544	3	ml
2016-11-07T07:33:59.600Z	36.4564	-98.7622	32km NW of Fairview, Oklahoma	7.944	4.1	mb
2016-11-07T04:52:35.670Z	37.3738	-97.735	8km WSW of Conway Springs, Kansas	2.03	3.1	mb_lg
2016-11-07T01:52:32.900Z	36.0062	-96.7679	2km N of Cushing, Oklahoma	5.36	3	ml
2016-11-07T01:44:24.500Z	35.9907	-96.803	3km W of Cushing, Oklahoma	4.43	5	mww
2016-11-06T19:43:07.600Z	36.3665	-97.0732	21km ENE of Perry, Oklahoma	5.898	3	ml
2016-11-06T03:20:43.700Z	36.2505	-97.2196	7km SE of Perry, Oklahoma	7.873	3.4	mwr
2016-11-05T09:39:44.100Z	36.3038	-96.671	12km ESE of Pawnee, Oklahoma	3.919	3.3	mwr
2016-11-04T23:06:44.900Z	36.1495	-97.6595	21km ENE of Hennessey, Oklahoma	5.368	3.3	ml
2016-11-02T15:10:43.700Z	36.3001	-96.6744	12km ESE of Pawnee, Oklahoma	3.914	3.1	ml
2016-11-02T04:26:54.000Z	36.3047	-96.6657	12km ESE of Pawnee, Oklahoma	4.349	4.4	mwr
2016-11-02T00:48:29.100Z	36.1479	-97.6578	22km ENE of Hennessey, Oklahoma	4.489	3	ml
2016-11-02T00:20:59.900Z	35.5673	-98.1261	15km WNW of El Reno, Oklahoma	3.687	3.3	ml
2016-11-02T00:10:05.500Z	35.5692	-98.1286	16km WNW of El Reno, Oklahoma	4.705	3.1	ml
2016-10-31T03:27:03.900Z	36.2856	-97.5073	19km W of Perry, Oklahoma	8.161	3.4	mwr
2016-10-31T02:53:27.700Z	36.4327	-96.9085	14km NW of Pawnee, Oklahoma	4.506	3	ml
2016-10-30T19:26:46.400Z	36.251	-97.2213	7km SE of Perry, Oklahoma	7.978	3.3	ml
2016-10-30T10:21:02.200Z	36.3126	-97.0419	21km N of Stillwater, Oklahoma	6.788	3.4	mwr
2016-10-29T11:50:23.300Z	36.5715	-97.3821	13km SSW of Tonkawa, Oklahoma	8.244	3.2	ml
2016-10-29T11:44:53.500Z	36.5707	-97.3888	13km SSW of Tonkawa, Oklahoma	6.3	3.1	ml
2016-10-29T06:06:01.800Z	36.4008	-96.8854	10km NW of Pawnee, Oklahoma	4.57	3.3	ml
2016-10-28T18:24:54.700Z	36.4387	-96.8916	13km NW of Pawnee, Oklahoma	4.542	3.1	ml
2016-10-28T15:50:39.600Z	36.7584	-98.0587	26km E of Cherokee, Oklahoma	7.412	3	ml
2016-10-27T06:08:39.000Z	35.6579	-97.1556	3km E of Luther, Oklahoma	5.701	3.6	ml
2016-10-26T06:19:03.500Z	36.3315	-97.5195	21km WNW of Perry, Oklahoma	7.988	3.5	ml
2016-10-24T13:25:55.020Z	37.1583	-97.8237	18km E of Anthony, Kansas	4.78	3.5	ml
2016-10-24T00:33:34.200Z	36.8173	-97.5462	16km E of Medford, Oklahoma	7.951	3.3	ml
2016-10-22T13:03:13.800Z	36.6502	-99.0777	26km NNE of Mooreland, Oklahoma	4.666	3.1	ml
2016-10-21T22:54:31.700Z	36.4427	-98.7844	33km NW of Fairview, Oklahoma	7.334	3.2	ml
2016-10-21T22:48:18.300Z	36.4439	-98.7815	33km NW of Fairview, Oklahoma	7.321	3	ml
2016-10-21T20:47:39.400Z	36.4449	-98.779	33km NW of Fairview, Oklahoma	7.396	3.4	mwr
2016-10-21T20:33:56.700Z	36.4507	-98.7752	33km NW of Fairview, Oklahoma	7.346	3.1	ml
2016-10-21T20:26:00.500Z	36.4493	-98.7758	33km NW of Fairview, Oklahoma	7.081	4	mwr
2016-10-21T20:25:35.780Z	36.4642	-98.3036	9km SSW of Helena, Oklahoma	5	3.8	mb_lg
2016-10-20T17:09:07.900Z	35.8445	-97.372	6km SE of Guthrie, Oklahoma	6.061	3	ml
2016-10-20T12:14:07.900Z	36.9295	-97.644	11km SSW of Caldwell, Kansas	5.448	3.4	mwr
2016-10-19T22:54:14.000Z	36.4793	-98.7937	36km NW of Fairview, Oklahoma	5.263	3.1	ml

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Preparer: D. Horne; Date: 02/15/21
Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2016-10-19T22:33:35.100Z	36.7643	-97.7671	5km SSW of Medford, Oklahoma	7.977	3.1	mwr
2016-10-19T12:04:51.500Z	36.4144	-96.8699	10km NW of Pawnee, Oklahoma	5.117	3	ml
2016-10-19T07:06:29.400Z	36.5225	-98.3547	8km WSW of Helena, Oklahoma	6.587	3.1	ml
2016-10-18T04:04:41.170Z	35.6617	-97.4002	7km E of Edmond, Oklahoma	4.55	3	mb lg
2016-10-17T18:56:54.600Z	35.8678	-96.6821	13km N of Stroud, Oklahoma	6.635	3	ml
2016-10-15T14:11:20.200Z	36.3744	-97.7133	14km E of Enid, Oklahoma	4.967	3.1	ml
2016-10-14T11:50:31.300Z	36.5091	-99.0685	14km ENE of Mooreland, Oklahoma	5.916	3.2	ml
2016-10-13T02:48:41.500Z	36.7911	-98.3328	4km NNE of Cherokee, Oklahoma	6.164	3.3	mwr
2016-10-10T21:55:10.000Z	36.4184	-98.1409	18km SE of Helena, Oklahoma	7.943	3	ml
2016-10-10T20:27:55.000Z	36.4362	-96.9028	14km NW of Pawnee, Oklahoma	3.839	3.2	ml
2016-10-10T15:44:10.800Z	36.4474	-98.7783	33km NW of Fairview, Oklahoma	7.864	3	ml
2016-10-09T20:07:22.800Z	36.5057	-99.066	14km ENE of Mooreland, Oklahoma	5.663	3	ml
2016-10-09T12:23:05.100Z	36.4171	-96.8917	11km NW of Pawnee, Oklahoma	4.466	3.5	mwr
2016-10-08T11:10:29.400Z	36.4516	-98.7704	33km NW of Fairview, Oklahoma	7.995	3.3	ml
2016-10-06T10:53:18.400Z	36.8215	-97.5453	16km E of Medford, Oklahoma	9.012	3.6	ml
2016-10-06T00:19:04.000Z	36.4197	-96.9174	13km NW of Pawnee, Oklahoma	4.167	3.4	ml
2016-10-05T16:45:59.100Z	36.4447	-98.7825	33km NW of Fairview, Oklahoma	7.707	3.2	ml
2016-10-05T16:01:08.300Z	35.8637	-96.6823	12km N of Stroud, Oklahoma	5.947	3	ml
2016-10-05T15:02:26.400Z	36.445	-98.7781	33km NW of Fairview, Oklahoma	7.231	3.3	mwr
2016-10-05T13:46:10.500Z	36.4608	-99.1555	5km ENE of Mooreland, Oklahoma	4.079	3	ml
2016-10-05T09:54:33.100Z	36.4065	-96.938	14km WNW of Pawnee, Oklahoma	5.796	3	ml
2016-10-04T13:10:44.400Z	35.8633	-96.6822	12km N of Stroud, Oklahoma	5.868	3.3	ml
2016-10-04T09:10:37.900Z	36.4275	-96.9394	15km NW of Pawnee, Oklahoma	5.76	3.7	ml
2016-10-02T03:51:09.900Z	36.2139	-97.5672	26km WSW of Perry, Oklahoma	6.321	3.2	ml
2016-09-30T05:45:36.100Z	36.5034	-99.0645	14km ENE of Mooreland, Oklahoma	6.418	3.3	ml
2016-09-29T18:08:35.200Z	36.2779	-98.4064	6km E of Fairview, Oklahoma	5.754	3.1	mwr
2016-09-29T06:24:55.000Z	36.3761	-96.94	12km WNW of Pawnee, Oklahoma	5.926	3.1	ml
2016-09-27T06:09:59.810Z	36.5093	-97.2556	19km SSE of Tonkawa, Oklahoma	2.15	3	mb lg
2016-09-26T23:30:51.600Z	36.8174	-98.2727	10km NE of Cherokee, Oklahoma	6.764	3.8	ml
2016-09-26T15:47:03.300Z	36.0912	-97.4441	20km NE of Crescent, Oklahoma	6.995	3.4	ml
2016-09-24T22:41:29.400Z	35.9798	-97.1997	6km NE of Langston, Oklahoma	5.816	3.3	mwr
2016-09-23T08:28:17.800Z	36.42	-96.906	12km NW of Pawnee, Oklahoma	3.3	3	ml
2016-09-21T06:18:48.200Z	35.8531	-97.2346	10km S of Langston, Oklahoma	6.159	3.2	mwr
2016-09-20T18:40:07.500Z	36.9344	-97.9058	20km NW of Medford, Oklahoma	5.562	3.1	ml
2016-09-20T04:59:10.800Z	36.9375	-97.906	21km NW of Medford, Oklahoma	5.295	3.9	mwr
2016-09-18T18:30:34.600Z	36.281	-97.5116	20km W of Perry, Oklahoma	6.939	3.2	ml
2016-09-17T06:18:53.300Z	36.7021	-97.7395	11km S of Medford, Oklahoma	6.358	3	ml
2016-09-17T06:08:07.700Z	36.8673	-98.3474	12km N of Cherokee, Oklahoma	5.564	3.5	ml
2016-09-16T23:55:33.300Z	36.4595	-98.759	32km NW of Fairview, Oklahoma	7.683	3.9	ml
2016-09-16T18:01:28.000Z	36.7824	-98.561	9km ESE of Alva, Oklahoma	5	3	ml
2016-09-14T22:43:57.200Z	35.6691	-97.4022	7km ENE of Edmond, Oklahoma	7.304	3.2	ml
2016-09-14T17:13:44.900Z	36.451	-98.7703	32km NW of Fairview, Oklahoma	7.783	3.7	mwr
2016-09-13T17:45:18.200Z	36.7819	-97.8178	8km WSW of Medford, Oklahoma	6.784	3.3	ml
2016-09-13T16:18:00.580Z	37.3628	-98.0942	10km NW of Harper, Kansas	8.44	3.3	ml
2016-09-13T15:09:14.400Z	36.7791	-97.8203	8km WSW of Medford, Oklahoma	5.781	3	ml
2016-09-13T02:15:21.300Z	36.2466	-98.4464	3km SE of Fairview, Oklahoma	6.105	3.7	ml
2016-09-13T02:05:48.200Z	36.2452	-98.4476	3km SE of Fairview, Oklahoma	6.022	3.3	mwr
2016-09-12T21:39:14.500Z	36.4316	-96.9089	14km NW of Pawnee, Oklahoma	4.376	3	ml
2016-09-12T05:54:12.700Z	36.4068	-96.8542	8km NNW of Pawnee, Oklahoma	5.267	3	ml
2016-09-10T11:38:25.700Z	35.8799	-97.1226	13km SW of Perkins, Oklahoma	4.673	3.2	ml
2016-09-09T22:51:28.210Z	36.0947	-96.7449	4km WSW of Yale, Oklahoma	5	3.1	mb lg
2016-09-09T22:35:35.200Z	36.7216	-98.3926	4km SW of Cherokee, Oklahoma	4.121	3	ml
2016-09-09T17:31:40.900Z	36.3163	-96.9678	14km W of Pawnee, Oklahoma	6.846	3.7	ml
2016-09-09T02:06:29.100Z	35.5166	-97.3974	1km WSW of Spencer, Oklahoma	7.481	3.5	mwr
2016-09-09T00:21:33.200Z	36.3955	-97.2956	11km N of Perry, Oklahoma	6.527	3	ml
2016-09-08T21:38:43.400Z	36.1683	-97.048	5km N of Stillwater, Oklahoma	6.014	3.1	ml
2016-09-08T21:34:43.100Z	36.1674	-97.0459	5km N of Stillwater, Oklahoma	5.942	3.2	ml
2016-09-08T21:29:29.000Z	36.286	-97.5077	19km W of Perry, Oklahoma	5.131	3.3	mwr
2016-09-07T21:04:24.900Z	36.9445	-97.9005	21km NW of Medford, Oklahoma	4.378	3.3	ml
2016-09-07T02:26:50.500Z	36.4326	-96.908	14km NW of Pawnee, Oklahoma	4.444	3.1	mwr
2016-09-06T18:33:49.200Z	36.9371	-97.9073	21km NW of Medford, Oklahoma	4.881	3.5	ml
2016-09-06T17:49:45.040Z	36.9241	-97.9341	22km NW of Medford, Oklahoma	9.53	3.7	mb lg
2016-09-06T17:48:34.200Z	36.9372	-97.9125	21km NW of Medford, Oklahoma	4.448	3.9	mwr

Table 2-3 - Revision 0
Historical Earthquakes in Oklahoma
Greater than 3.0 Magnitude
(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2016-09-05T21:15:46.200Z	36.3557	-97.4312	14km WNW of Perry, Oklahoma	5	3.1	ml
2016-09-04T20:03:06.900Z	36.038	-96.7809	6km NNW of Cushing, Oklahoma	5.06	3.1	ml
2016-09-04T14:29:23.100Z	36.4299	-96.9211	14km NW of Pawnee, Oklahoma	8.137	3	ml
2016-09-04T12:56:04.900Z	36.4124	-96.8891	11km NW of Pawnee, Oklahoma	1.47	3	ml
2016-09-04T04:20:28.000Z	36.3195	-96.965	14km W of Pawnee, Oklahoma	5.972	3.2	ml
2016-09-04T03:55:46.400Z	36.0387	-96.7784	6km N of Cushing, Oklahoma	5.159	3.2	ml
2016-09-04T03:15:56.400Z	36.4155	-96.8844	11km NW of Pawnee, Oklahoma	3.551	3.1	ml
2016-09-03T23:56:36.600Z	36.4148	-96.8557	9km NNW of Pawnee, Oklahoma	8.275	3	ml
2016-09-03T20:50:24.700Z	36.3118	-96.9725	15km W of Pawnee, Oklahoma	5.254	3	ml
2016-09-03T18:38:51.900Z	36.2137	-97.5725	26km WSW of Perry, Oklahoma	6.32	3	ml
2016-09-03T15:31:40.900Z	36.4187	-96.8838	11km NW of Pawnee, Oklahoma	6.47	3.4	ml
2016-09-03T14:47:04.200Z	36.4141	-96.8589	9km NNW of Pawnee, Oklahoma	8.304	3.3	ml
2016-09-03T12:58:37.800Z	36.4233	-96.9093	13km NW of Pawnee, Oklahoma	6.162	3.6	ml
2016-09-03T12:16:22.200Z	36.4148	-96.8522	9km NNW of Pawnee, Oklahoma	7.99	3.3	ml
2016-09-03T12:02:44.400Z	36.4251	-96.9291	14km NW of Pawnee, Oklahoma	5.557	5.8	mww
2016-09-03T02:39:52.800Z	35.6566	-97.1511	4km E of Luther, Oklahoma	5.522	3.4	ml
2016-09-03T01:45:07.600Z	36.8523	-97.6967	6km NNE of Medford, Oklahoma	6.897	3.4	ml
2016-09-01T11:46:33.700Z	36.4395	-96.899	14km NW of Pawnee, Oklahoma	3.157	3	ml
2016-09-01T06:25:19.100Z	36.4848	-98.6026	26km NNW of Fairview, Oklahoma	6.563	3.2	ml
2016-09-01T02:19:51.020Z	37.0553	-97.5368	6km ENE of Caldwell, Kansas	5.6	3.1	ml
2016-08-31T03:24:22.900Z	36.5266	-97.8801	14km N of Enid, Oklahoma	6.134	3.3	ml
2016-08-30T18:56:40.600Z	36.6502	-97.7088	17km S of Medford, Oklahoma	7.254	3.1	ml
2016-08-30T08:24:55.300Z	36.9382	-97.9103	21km NW of Medford, Oklahoma	4.544	3	ml
2016-08-30T04:03:12.200Z	35.977	-97.2023	5km NE of Langston, Oklahoma	6.383	3.1	ml
2016-08-29T17:55:37.300Z	36.2152	-97.5665	26km WSW of Perry, Oklahoma	5.839	3	ml
2016-08-29T17:53:52.200Z	36.2144	-97.5752	27km WSW of Perry, Oklahoma	6.221	3.6	ml
2016-08-27T08:16:08.100Z	36.3742	-97.7229	14km E of Enid, Oklahoma	6.146	3.6	mwr
2016-08-24T10:08:56.100Z	36.0709	-96.7515	6km SW of Yale, Oklahoma	3.708	3.3	ml
2016-08-20T02:32:06.500Z	36.5358	-98.9594	24km ENE of Mooreland, Oklahoma	5.526	3.2	ml
2016-08-19T10:40:43.980Z	37.5673	-97.8095	7km SSW of Cheney, Kansas	1.52	3.5	mb lg
2016-08-17T13:34:28.700Z	35.6775	-97.0794	10km E of Luther, Oklahoma	6.055	4	mwr
2016-08-17T02:39:05.800Z	36.2476	-98.4451	3km SE of Fairview, Oklahoma	6.075	3.3	mwr
2016-08-16T17:48:26.400Z	36.5139	-97.2135	20km SSE of Tonkawa, Oklahoma	6.343	3.1	ml
2016-08-16T06:08:14.400Z	35.6569	-97.1528	3km E of Luther, Oklahoma	5.725	3.3	mwr
2016-08-15T12:16:49.800Z	36.765	-97.6027	12km ESE of Medford, Oklahoma	7.168	3	ml
2016-08-15T11:12:14.900Z	36.4167	-97.3581	15km NNW of Perry, Oklahoma	7.596	3.1	ml
2016-08-14T12:22:21.900Z	36.8167	-97.6227	9km E of Medford, Oklahoma	6.603	3.5	ml
2016-08-14T03:22:55.500Z	36.6599	-98.0868	20km NE of Helena, Oklahoma	6.637	3.1	ml
2016-08-12T09:04:56.000Z	36.416	-97.3574	15km NNW of Perry, Oklahoma	7.355	3.1	ml
2016-08-12T05:27:10.400Z	36.6602	-98.0867	20km NE of Helena, Oklahoma	6.419	3.6	mwr
2016-08-10T16:34:53.800Z	35.6613	-97.1824	1km E of Luther, Oklahoma	5.246	3.5	ml
2016-08-10T11:04:49.500Z	35.6619	-97.1815	1km E of Luther, Oklahoma	5.429	3.6	mwr
2016-08-10T06:36:53.300Z	36.2138	-97.5587	25km WSW of Perry, Oklahoma	5.041	3.2	ml
2016-08-09T21:54:26.100Z	36.2137	-97.5688	26km WSW of Perry, Oklahoma	6.444	3.2	mwr
2016-08-09T21:46:41.400Z	36.211	-97.57	26km WSW of Perry, Oklahoma	6.6	3.9	mwr
2016-08-09T21:46:34.300Z	36.211	-97.575	27km WSW of Perry, Oklahoma	6.9	3.6	mb
2016-08-09T14:32:19.300Z	36.2842	-97.5094	19km W of Perry, Oklahoma	7.187	3.1	ml
2016-08-07T09:13:53.700Z	36.1772	-97.415	16km SW of Perry, Oklahoma	6.424	3	ml
2016-08-07T01:45:44.400Z	36.4874	-98.4942	21km WSW of Helena, Oklahoma	9.162	3.3	ml
2016-08-05T13:43:12.100Z	36.7108	-98.1088	22km ESE of Cherokee, Oklahoma	6.526	3.2	ml
2016-08-05T06:59:51.500Z	36.7598	-98.0742	25km E of Cherokee, Oklahoma	6.409	3	ml
2016-08-05T00:13:07.200Z	36.4682	-98.7508	32km NW of Fairview, Oklahoma	8.274	3.4	ml
2016-07-31T17:26:30.890Z	35.0752	-97.572	10km SE of Blanchard, Oklahoma	5.83	3.1	mb lg
2016-07-29T01:35:18.000Z	36.2168	-97.5742	26km WSW of Perry, Oklahoma	4.725	3.6	mwr
2016-07-24T23:36:06.900Z	36.4513	-98.7711	33km NW of Fairview, Oklahoma	7.745	3.1	ml
2016-07-24T08:09:07.000Z	36.1281	-97.0977	3km WNW of Stillwater, Oklahoma	5.922	3	ml
2016-07-22T22:21:42.600Z	36.5866	-98.5431	24km SW of Cherokee, Oklahoma	7.43	3.4	ml
2016-07-22T13:16:55.600Z	36.7926	-97.5467	16km E of Medford, Oklahoma	7.003	3.1	ml
2016-07-21T21:33:30.900Z	36.3548	-97.0908	19km ENE of Perry, Oklahoma	10.354	3.6	ml
2016-07-19T16:12:30.000Z	36.2871	-97.511	20km W of Perry, Oklahoma	5.305	3.2	ml
2016-07-19T00:39:03.700Z	36.8213	-97.6153	10km E of Medford, Oklahoma	6.924	3.4	ml
2016-07-18T18:54:34.000Z	36.0242	-97.5168	10km NE of Crescent, Oklahoma	5.732	3.2	ml
2016-07-17T08:04:46.900Z	36.2868	-97.5052	19km W of Perry, Oklahoma	5.898	3.1	ml

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Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2016-07-17T04:22:40.700Z	36.2858	-97.5121	20km W of Perry, Oklahoma	6.244	3.5	ml
2016-07-17T04:17:58.900Z	36.2841	-97.5138	20km W of Perry, Oklahoma	4.787	4.2	mwr
2016-07-16T16:21:44.900Z	36.8871	-97.3216	9km NNW of Blackwell, Oklahoma	7.801	3	ml
2016-07-16T11:47:58.800Z	35.9131	-97.3483	7km ENE of Guthrie, Oklahoma	4.872	3.1	ml
2016-07-15T00:00:01.200Z	36.3425	-97.6722	19km ESE of Enid, Oklahoma	6.149	3	ml
2016-07-14T05:52:49.900Z	35.4769	-97.3543	3km WSW of Nicoma Park, Oklahoma	6.824	3.4	ml
2016-07-13T21:19:16.900Z	36.6758	-98.2662	11km SE of Cherokee, Oklahoma	7.132	3.2	ml
2016-07-13T18:04:39.400Z	36.8423	-98.241	14km NE of Cherokee, Oklahoma	3.513	3	ml
2016-07-13T15:00:29.200Z	36.5402	-98.6728	29km S of Alva, Oklahoma	4.494	3	mwr
2016-07-11T20:28:57.700Z	35.9767	-97.1863	7km ENE of Langston, Oklahoma	5.816	3.1	ml
2016-07-09T23:34:32.200Z	35.8041	-97.2429	15km S of Langston, Oklahoma	6.53	3.1	ml
2016-07-09T21:40:14.700Z	36.4801	-98.7348	32km NW of Fairview, Oklahoma	7.593	3.4	ml
2016-07-09T21:21:22.400Z	36.733	-98.748	10km SW of Alva, Oklahoma	6.868	3	ml
2016-07-09T16:20:23.000Z	35.9787	-97.2015	6km NE of Langston, Oklahoma	5	3.6	ml
2016-07-09T09:08:59.900Z	36.708	-98.1095	22km NE of Cherokee, Oklahoma	6.004	3	ml
2016-07-09T07:10:38.600Z	36.328	-97.5128	20km WNW of Perry, Oklahoma	7.417	3	ml
2016-07-09T04:19:26.600Z	36.4574	-98.7699	33km NW of Fairview, Oklahoma	6.526	3.3	ml
2016-07-09T02:51:15.100Z	36.4552	-98.767	33km NW of Fairview, Oklahoma	7.616	3.4	ml
2016-07-09T02:21:34.100Z	36.4533	-98.7692	33km NW of Fairview, Oklahoma	7.913	3.1	ml
2016-07-09T02:04:27.400Z	36.4638	-98.7584	33km NW of Fairview, Oklahoma	7.242	4.4	mwr
2016-07-09T01:01:29.700Z	36.4766	-98.7449	33km NW of Fairview, Oklahoma	5.949	3.1	ml
2016-07-08T23:27:12.200Z	36.4841	-98.7435	33km NW of Fairview, Oklahoma	6.701	3.1	ml
2016-07-08T22:29:38.000Z	36.4749	-98.7459	33km NW of Fairview, Oklahoma	6.356	4.2	mwr
2016-07-08T21:31:57.600Z	36.4765	-98.7387	32km NW of Fairview, Oklahoma	7.315	4.2	mwr
2016-07-08T19:06:18.400Z	35.059	-97.6064	9km SSE of Blanchard, Oklahoma	5.875	3.4	ml
2016-07-05T20:17:15.100Z	37.3553	-98.1952	16km WNW of Harper, Kansas	5	3.5	mb_lg
2016-07-05T17:21:57.400Z	36.2713	-97.5711	25km W of Perry, Oklahoma	6.408	3.2	mwr
2016-07-05T04:58:53.600Z	35.851	-97.233	10km S of Langston, Oklahoma	6.549	3	ml
2016-07-04T21:01:44.100Z	35.8512	-97.2321	10km SSE of Langston, Oklahoma	5.947	3	ml
2016-07-03T17:32:15.800Z	36.1594	-96.7365	6km NNW of Yale, Oklahoma	5.399	3.4	ml
2016-07-02T12:10:14.700Z	36.8177	-97.6184	10km E of Medford, Oklahoma	6.147	3.4	ml
2016-07-02T06:22:56.070Z	37.3709	-98.0114	9km N of Harper, Kansas	6.59	3.3	mb_lg
2016-07-02T05:04:53.300Z	36.8181	-97.6178	10km E of Medford, Oklahoma	6.022	3.2	ml
2016-07-01T07:26:15.100Z	36.2813	-97.5159	20km W of Perry, Oklahoma	7.135	3.3	ml
2016-06-30T22:25:03.700Z	36.4771	-98.7412	32km NW of Fairview, Oklahoma	7.694	3.5	mwr
2016-06-29T14:15:16.900Z	35.0083	-97.795	13km ESE of Chickasha, Oklahoma	5.445	3	ml
2016-06-29T07:59:05.700Z	36.2842	-97.5126	20km W of Perry, Oklahoma	7.412	3.3	ml
2016-06-28T19:57:56.000Z	35.8562	-97.2272	10km SSE of Langston, Oklahoma	5.641	3.6	mwr
2016-06-28T19:26:25.200Z	36.4736	-98.7464	31km NW of Fairview, Oklahoma	6.961	3.2	ml
2016-06-28T03:25:08.000Z	36.7011	-98.6607	11km S of Alva, Oklahoma	5.341	3.4	mwr
2016-06-28T02:50:10.900Z	36.5058	-99.0562	15km ENE of Mooreland, Oklahoma	5.883	3.1	ml
2016-06-26T19:48:54.800Z	36.0852	-97.6761	16km NNW of Crescent, Oklahoma	5.686	3	ml
2016-06-26T18:35:34.680Z	37.354	-98.2036	17km WNW of Harper, Kansas	5	3.4	mb_lg
2016-06-25T18:03:22.440Z	37.0103	-97.558	4km ESE of Caldwell, Kansas	5.3	3.1	ml
2016-06-25T10:30:35.800Z	36.5024	-99.0565	15km ENE of Mooreland, Oklahoma	5.203	3.4	mwr
2016-06-25T04:34:53.100Z	36.213	-97.5668	26km WSW of Perry, Oklahoma	6.216	3.3	ml
2016-06-23T20:42:02.900Z	36.5335	-98.964	23km ENE of Mooreland, Oklahoma	6.114	3	ml
2016-06-23T11:35:02.500Z	36.4754	-98.7434	32km NW of Fairview, Oklahoma	7.987	3	ml
2016-06-22T09:50:49.700Z	36.6763	-98.7738	17km SW of Alva, Oklahoma	6.354	3.3	ml
2016-06-21T17:07:45.800Z	36.5073	-98.4792	19km WSW of Helena, Oklahoma	4.605	3.5	ml
2016-06-21T01:13:53.500Z	36.4534	-98.7719	33km NW of Fairview, Oklahoma	7.697	3.1	ml
2016-06-21T00:10:30.400Z	36.4512	-98.7708	33km NW of Fairview, Oklahoma	7.427	3.3	ml
2016-06-20T08:50:46.100Z	36.452	-98.7703	33km NW of Fairview, Oklahoma	7.027	3.4	mwr
2016-06-19T16:31:54.700Z	36.8826	-97.3209	9km NNW of Blackwell, Oklahoma	7.201	3	ml
2016-06-19T01:34:57.800Z	36.5871	-98.5399	24km SW of Cherokee, Oklahoma	6.257	3.3	ml
2016-06-18T21:33:15.000Z	35.5322	-97.1115	6km NE of Harrah, Oklahoma	6.601	3.6	ml
2016-06-18T16:05:56.100Z	35.8028	-97.2487	15km S of Langston, Oklahoma	5.993	3.2	ml
2016-06-17T05:09:14.900Z	35.6719	-97.4088	6km ENE of Edmond, Oklahoma	6.048	3.1	ml
2016-06-16T06:15:04.100Z	36.3757	-97.7204	14km E of Enid, Oklahoma	4.825	3	ml
2016-06-15T21:08:01.600Z	36.2186	-97.2848	7km S of Perry, Oklahoma	6.429	3.1	ml
2016-06-15T16:28:24.000Z	36.7211	-98.7324	11km SSW of Alva, Oklahoma	6.661	3	ml
2016-06-15T15:43:53.200Z	36.484	-99.0981	10km ENE of Mooreland, Oklahoma	5.725	3.3	ml
2016-06-15T14:36:28.400Z	36.7233	-98.7296	10km SSW of Alva, Oklahoma	6.117	3.3	ml

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Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2016-06-15T14:30:57.500Z	36.7209	-98.7302	10km SSW of Alva, Oklahoma	6.725	3	ml
2016-06-14T06:33:30.200Z	36.6164	-98.4256	15km WNW of Helena, Oklahoma	6.115	3.1	ml
2016-06-14T02:55:29.400Z	36.2196	-97.2844	7km S of Perry, Oklahoma	7.059	3	ml
2016-06-13T11:52:08.600Z	36.4531	-98.7805	33km NW of Fairview, Oklahoma	5.875	3.2	ml
2016-06-12T19:44:33.500Z	35.8551	-97.2309	10km SSE of Langston, Oklahoma	5.983	3	ml
2016-06-12T10:15:25.500Z	35.8575	-97.2246	10km SSE of Langston, Oklahoma	5.951	3.1	ml
2016-06-11T07:27:02.440Z	37.2038	-97.7357	22km SSW of Conway Springs, Kansas	7.75	3.2	mwr
2016-06-11T01:17:18.500Z	36.4887	-98.7261	32km NW of Fairview, Oklahoma	7.265	3.5	ml
2016-06-09T21:58:36.300Z	36.2863	-97.5135	20km W of Perry, Oklahoma	6.897	3.6	ml
2016-06-09T11:15:28.400Z	36.6032	-97.6141	25km SSE of Medford, Oklahoma	6.567	3.3	ml
2016-06-09T08:02:02.100Z	36.4482	-98.7801	33km NW of Fairview, Oklahoma	6.983	3.4	mwr
2016-06-08T16:50:41.700Z	36.4428	-96.8883	13km NNW of Pawnee, Oklahoma	6.632	3.9	ml
2016-06-07T16:54:37.400Z	35.6623	-97.4245	4km ENE of Edmond, Oklahoma	5.869	3.2	ml
2016-06-06T19:59:38.400Z	36.6697	-97.7414	15km S of Medford, Oklahoma	7.109	3	ml
2016-06-06T18:54:51.000Z	36.2534	-96.7622	10km SSE of Pawnee, Oklahoma	5	3.2	mwr
2016-06-06T18:52:16.600Z	36.4268	-96.9184	14km NW of Pawnee, Oklahoma	8.602	3.3	mwr
2016-06-06T14:49:49.300Z	36.3744	-97.725	13km E of Enid, Oklahoma	6.369	3.2	ml
2016-06-06T00:35:33.100Z	35.5773	-97.2849	1km N of Jones, Oklahoma	6.123	3.3	mwr
2016-06-05T17:08:17.840Z	37.1898	-97.9905	5km NE of Anthony, Kansas	5.15	3.4	ml
2016-06-04T04:43:27.000Z	36.535	-98.9641	24km ENE of Mooreland, Oklahoma	6.111	3.1	ml
2016-06-04T01:47:08.100Z	36.2686	-97.5731	25km W of Perry, Oklahoma	5.331	3.2	ml
2016-06-02T18:03:21.300Z	36.4166	-98.1423	18km SE of Helena, Oklahoma	6.894	3.2	ml
2016-06-02T01:28:54.900Z	36.3756	-97.7246	13km E of Enid, Oklahoma	6.388	3.4	ml
2016-06-01T18:13:18.290Z	37.1913	-97.9893	5km NE of Anthony, Kansas	4.99	3.1	ml
2016-06-01T06:20:56.500Z	36.8911	-97.3867	13km NW of Blackwell, Oklahoma	8.157	3.2	ml
2016-05-31T10:54:09.400Z	35.6541	-97.1549	3km ESE of Luther, Oklahoma	5.648	3.3	ml
2016-05-29T02:47:19.200Z	36.0815	-97.3095	15km NNW of Langston, Oklahoma	5.871	3.5	ml
2016-05-28T04:59:30.500Z	36.1819	-96.9694	10km NE of Stillwater, Oklahoma	6.292	3	ml
2016-05-27T01:26:34.900Z	36.4659	-98.7583	33km NW of Fairview, Oklahoma	6.916	3.2	ml
2016-05-26T01:21:26.500Z	35.7256	-97.1637	7km NNE of Luther, Oklahoma	5.581	3.3	ml
2016-05-25T06:09:59.500Z	36.4571	-98.7663	33km NW of Fairview, Oklahoma	7.265	3.2	ml
2016-05-23T01:24:17.400Z	35.9781	-97.2001	6km NE of Langston, Oklahoma	5.018	3.1	ml
2016-05-23T00:22:57.400Z	35.9784	-97.2001	6km NE of Langston, Oklahoma	5.168	3	ml
2016-05-22T12:00:46.000Z	36.3749	-97.7227	14km E of Enid, Oklahoma	6.118	3.2	mwr
2016-05-21T14:46:06.100Z	36.5469	-97.0688	14km S of McCord, Oklahoma	5.229	3.2	ml
2016-05-20T05:41:04.700Z	36.4821	-98.7473	33km NW of Fairview, Oklahoma	5.783	3	ml
2016-05-20T02:16:03.900Z	36.4731	-98.7452	32km NW of Fairview, Oklahoma	7.72	3.6	ml
2016-05-19T21:17:08.500Z	35.8572	-97.2254	10km SSE of Langston, Oklahoma	5.848	3.2	mwr
2016-05-19T15:55:35.400Z	35.9531	-97.3931	8km NNE of Guthrie, Oklahoma	6.297	3.1	ml
2016-05-16T21:45:03.900Z	35.6683	-97.1532	3km E of Luther, Oklahoma	5.928	3.1	ml
2016-05-15T14:59:47.200Z	35.6655	-97.1642	2km E of Luther, Oklahoma	6.136	3.4	mwr
2016-05-15T07:23:06.800Z	36.3748	-97.7198	14km E of Enid, Oklahoma	5.848	3.6	ml
2016-05-14T22:39:30.900Z	36.5226	-98.6957	31km S of Alva, Oklahoma	5.923	3	ml
2016-05-14T03:39:27.500Z	35.0531	-97.5573	12km SW of Goldsby, Oklahoma	5	3.1	ml
2016-05-12T15:26:43.500Z	36.9528	-97.9704	22km SSE of Anthony, Kansas	3.944	3	ml
2016-05-12T14:21:16.200Z	36.2866	-97.5146	20km W of Perry, Oklahoma	7.325	3.3	ml
2016-05-11T23:07:26.200Z	36.396	-97.3243	12km NNW of Perry, Oklahoma	5	3.1	ml
2016-05-10T17:27:16.800Z	36.2996	-96.819	4km SSW of Pawnee, Oklahoma	4.227	3.1	ml
2016-05-09T16:10:04.700Z	36.858	-98.1512	21km ENE of Cherokee, Oklahoma	7.098	3	ml
2016-05-09T08:41:54.300Z	36.8231	-97.7014	3km ENE of Medford, Oklahoma	5.378	3.1	ml
2016-05-09T00:10:27.300Z	36.2679	-97.5724	25km W of Perry, Oklahoma	5.364	3.4	ml
2016-05-08T21:19:45.000Z	36.2692	-97.5734	25km W of Perry, Oklahoma	5.969	3.3	mwr
2016-05-08T00:09:31.100Z	36.8167	-97.6182	10km E of Medford, Oklahoma	6.144	3.1	mwr
2016-05-05T10:55:55.300Z	36.688	-98.2607	11km SE of Cherokee, Oklahoma	6.007	3.5	ml
2016-05-05T01:58:53.300Z	36.8869	-97.3185	9km NNW of Blackwell, Oklahoma	6.326	3	ml
2016-05-04T16:38:53.600Z	36.4575	-98.7616	32km NW of Fairview, Oklahoma	7.494	3.2	ml
2016-05-04T12:20:25.900Z	36.8731	-98.1372	23km NE of Cherokee, Oklahoma	5	3.3	ml
2016-05-03T10:35:01.600Z	36.8124	-97.7986	5km W of Medford, Oklahoma	7.308	3	ml
2016-05-03T06:49:40.700Z	36.874	-98.1444	23km NE of Cherokee, Oklahoma	5.847	3.6	ml
2016-05-03T05:45:33.500Z	36.8753	-98.1483	22km NE of Cherokee, Oklahoma	6.534	3.7	ml
2016-05-02T17:53:05.200Z	35.7232	-97.1612	7km NNE of Luther, Oklahoma	6.275	3.1	ml
2016-05-02T13:44:52.900Z	36.9204	-97.3528	14km NNW of Blackwell, Oklahoma	5.041	3	ml
2016-05-01T13:06:11.500Z	36.4685	-98.7525	33km NW of Fairview, Oklahoma	8.139	3.7	ml

Table 2-3 - Revision 0
Historical Earthquakes in Oklahoma
Greater than 3.0 Magnitude
(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2016-05-01T05:37:39.590Z	37.2093	-97.889	14km ENE of Anthony, Kansas	4.06	3.4	ml
2016-04-30T23:16:24.400Z	36.8608	-98.1514	21km ENE of Cherokee, Oklahoma	6.464	3.2	ml
2016-04-30T19:39:28.500Z	35.6625	-97.1762	1km E of Luther, Oklahoma	6.056	3	ml
2016-04-30T19:04:12.500Z	35.6613	-97.4249	4km E of Edmond, Oklahoma	6.039	3.1	ml
2016-04-30T03:34:05.600Z	35.5155	-97.3066	3km WNW of Choctaw, Oklahoma	5.943	3.2	ml
2016-04-29T22:45:03.000Z	36.8858	-97.3182	9km NNW of Blackwell, Oklahoma	4.647	3	ml
2016-04-29T21:56:55.500Z	35.7243	-97.1692	7km NNE of Luther, Oklahoma	5	3.4	ml
2016-04-29T16:20:35.600Z	35.7304	-97.1577	8km NNE of Luther, Oklahoma	5.326	3.4	ml
2016-04-29T05:06:28.500Z	35.5277	-96.7724	9km WNW of Prague, Oklahoma	5.2	3	ml
2016-04-29T03:48:50.300Z	36.8622	-98.0017	24km WNW of Medford, Oklahoma	4.978	3	ml
2016-04-28T02:12:59.600Z	36.2065	-97.3188	9km SSW of Perry, Oklahoma	5.071	3	ml
2016-04-27T21:18:23.200Z	35.7285	-97.159	8km NNE of Luther, Oklahoma	5.411	3	ml
2016-04-27T15:44:55.510Z	35.7422	-97.1777	9km N of Luther, Oklahoma	6.09	3.7	mwr
2016-04-27T11:31:20.900Z	35.5186	-97.0925	7km ENE of Harrah, Oklahoma	6.462	3	ml
2016-04-27T05:19:24.700Z	35.6612	-97.1777	1km E of Luther, Oklahoma	6.098	3	ml
2016-04-26T18:46:51.200Z	35.7276	-97.1616	7km NNE of Luther, Oklahoma	5	3.6	mwr
2016-04-26T15:44:11.900Z	35.5201	-97.0899	7km ENE of Harrah, Oklahoma	6.892	3.6	mwr
2016-04-26T06:25:56.500Z	36.4761	-98.7447	33km NW of Fairview, Oklahoma	6.957	3.4	mwr
2016-04-26T06:25:44.760Z	36.4563	-98.6856	27km NW of Fairview, Oklahoma	5.73	3	mwr
2016-04-23T22:32:42.600Z	36.2162	-97.5659	26km WSW of Perry, Oklahoma	4.964	3.4	ml
2016-04-23T08:36:23.500Z	35.335	-96.5376	17km NE of Seminole, Oklahoma	2.913	3	ml
2016-04-23T05:09:38.500Z	36.5208	-98.9837	21km ENE of Mooreland, Oklahoma	4.743	3	ml
2016-04-21T18:32:42.800Z	36.5316	-98.6872	30km S of Alva, Oklahoma	4.698	3.3	mwr
2016-04-21T11:22:38.000Z	36.4575	-96.8854	15km NNW of Pawnee, Oklahoma	1.743	3	ml
2016-04-21T07:00:56.500Z	36.0902	-96.7369	4km SW of Yale, Oklahoma	4.573	3.3	ml
2016-04-20T14:11:44.700Z	36.4593	-98.7711	33km NW of Fairview, Oklahoma	6.271	3.1	ml
2016-04-19T16:45:23.100Z	36.6492	-97.7101	17km S of Medford, Oklahoma	7.161	3	ml
2016-04-17T09:59:16.200Z	36.4157	-98.1403	18km SE of Helena, Oklahoma	7.815	3.2	ml
2016-04-15T14:04:29.000Z	36.4691	-98.841	32km E of Mooreland, Oklahoma	5.865	3.1	ml
2016-04-15T13:29:35.700Z	36.4684	-98.8506	31km E of Mooreland, Oklahoma	5.875	3	ml
2016-04-14T12:10:05.100Z	36.1673	-96.8051	11km WNW of Yale, Oklahoma	5.01	3	ml
2016-04-13T21:33:16.600Z	36.9203	-97.3551	14km NNW of Blackwell, Oklahoma	7.476	3.5	ml
2016-04-12T17:02:51.500Z	36.6229	-97.6924	20km S of Medford, Oklahoma	7.419	3.3	mwr
2016-04-12T15:17:17.500Z	36.2844	-97.5187	20km W of Perry, Oklahoma	7.327	3.5	ml
2016-04-11T18:08:21.200Z	36.4876	-98.5033	21km WSW of Helena, Oklahoma	13.54	3.5	ml
2016-04-10T16:24:57.200Z	36.5217	-98.9795	22km ENE of Mooreland, Oklahoma	4.926	3.4	ml
2016-04-09T21:55:44.100Z	36.8987	-97.6768	11km NNE of Medford, Oklahoma	5	3.4	mwr
2016-04-09T15:58:01.400Z	36.8259	-98.0141	25km W of Medford, Oklahoma	6.001	3	ml
2016-04-09T04:59:07.200Z	35.5863	-97.3896	7km N of Spencer, Oklahoma	6.792	3.1	ml
2016-04-08T20:30:15.600Z	35.939	-96.762	5km S of Cushing, Oklahoma	3.41	3	ml
2016-04-08T10:49:15.400Z	35.6612	-97.1709	2km E of Luther, Oklahoma	5.588	3.1	ml
2016-04-08T10:00:31.200Z	35.663	-97.1606	3km E of Luther, Oklahoma	4.965	3.2	ml
2016-04-08T09:37:10.600Z	36.333	-97.1838	10km ENE of Perry, Oklahoma	6.305	3.1	ml
2016-04-08T05:20:01.600Z	35.6631	-97.1717	2km E of Luther, Oklahoma	5.792	3.1	ml
2016-04-07T22:27:30.400Z	35.6619	-97.1741	1km E of Luther, Oklahoma	6.106	4.2	ml
2016-04-07T21:06:25.770Z	36.2124	-97.5716	26km WSW of Perry, Oklahoma	5	3.3	mwr
2016-04-07T18:51:26.200Z	36.4203	-98.1677	16km SSE of Helena, Oklahoma	7.284	3.1	ml
2016-04-07T08:29:32.800Z	36.4225	-98.1706	16km SSE of Helena, Oklahoma	7.556	3.7	ml
2016-04-07T07:37:53.700Z	35.662	-97.1735	2km E of Luther, Oklahoma	5.297	3.6	ml
2016-04-07T07:36:24.300Z	35.6608	-97.1681	2km E of Luther, Oklahoma	5	3.1	ml
2016-04-07T05:58:56.300Z	35.6619	-97.1692	2km E of Luther, Oklahoma	5.088	3.3	ml
2016-04-06T23:24:57.100Z	36.2133	-97.5636	26km WSW of Perry, Oklahoma	6.214	3.4	mwr
2016-04-05T19:12:14.300Z	35.9358	-96.7524	5km SSE of Cushing, Oklahoma	3.927	3	ml
2016-04-04T15:24:32.900Z	36.2917	-97.0724	19km N of Stillwater, Oklahoma	5.527	3	ml
2016-04-04T13:07:09.800Z	36.7285	-98.1566	18km E of Cherokee, Oklahoma	6.35	3.3	ml
2016-04-03T01:07:36.800Z	35.719	-97.1509	7km NNE of Luther, Oklahoma	5.549	3.2	ml
2016-04-03T00:59:36.100Z	35.7218	-97.1498	7km NNE of Luther, Oklahoma	5.589	3.3	ml
2016-04-02T21:20:01.800Z	35.6735	-97.3894	8km ENE of Edmond, Oklahoma	6.458	3.1	ml
2016-04-02T21:19:26.300Z	36.043	-97.0097	7km NNE of Perkins, Oklahoma	6.008	3	ml
2016-03-31T21:31:29.600Z	35.7193	-97.1491	7km NNE of Luther, Oklahoma	5.918	3.2	mwr
2016-03-31T21:21:23.000Z	35.7198	-97.1499	7km NNE of Luther, Oklahoma	4.117	3.2	mwr
2016-03-31T21:19:41.800Z	35.7142	-97.1527	6km NNE of Luther, Oklahoma	4.758	3	ml
2016-03-30T15:57:36.800Z	36.6245	-97.6879	20km SSE of Medford, Oklahoma	6.982	3.4	mwr

Table 2-3 - Revision 0
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(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2016-03-30T15:57:25.200Z	36.4684	-98.7495	32km NW of Fairview, Oklahoma	6.687	3.2	ml
2016-03-29T22:05:49.500Z	36.4704	-98.7501	32km NW of Fairview, Oklahoma	6.963	3.3	mwr
2016-03-29T21:12:46.080Z	36.4437	-98.6976	27km NW of Fairview, Oklahoma	4.84	3.3	mwr
2016-03-29T10:19:44.700Z	35.9888	-97.5725	4km NNE of Crescent, Oklahoma	5.556	3.6	mwr
2016-03-29T04:53:01.200Z	35.99	-97.5773	4km NNE of Crescent, Oklahoma	5.183	4.2	mwr
2016-03-27T23:28:22.800Z	36.6241	-97.6878	20km SSE of Medford, Oklahoma	6.854	3.2	ml
2016-03-27T07:19:53.800Z	36.9252	-97.3467	14km NNW of Blackwell, Oklahoma	6.962	3	ml
2016-03-27T06:09:23.900Z	36.5987	-97.8359	22km N of Enid, Oklahoma	7.264	3.3	ml
2016-03-27T06:01:47.000Z	36.5995	-97.8331	22km N of Enid, Oklahoma	7.205	3.3	mwr
2016-03-26T16:07:26.700Z	36.8787	-98.0113	26km WNW of Medford, Oklahoma	5	3	ml
2016-03-25T14:55:36.900Z	35.7241	-97.165	7km NNE of Luther, Oklahoma	5.527	3	ml
2016-03-24T12:47:04.200Z	36.5194	-98.9787	22km ENE of Mooreland, Oklahoma	4.639	3	ml
2016-03-23T11:45:16.400Z	36.8672	-98.341	12km N of Cherokee, Oklahoma	5.672	3.1	ml
2016-03-21T23:35:30.400Z	36.9006	-98.2661	18km NNE of Cherokee, Oklahoma	5	3	ml
2016-03-21T22:41:17.200Z	36.3705	-98.4457	11km NNE of Fairview, Oklahoma	7.396	3.1	ml
2016-03-20T20:54:01.100Z	36.2891	-97.5215	20km W of Perry, Oklahoma	7.619	3.2	ml
2016-03-20T08:29:55.300Z	36.4737	-98.5257	23km N of Fairview, Oklahoma	6.371	3.1	ml
2016-03-20T07:14:54.700Z	36.1902	-96.7806	11km NW of Yale, Oklahoma	6.776	3.3	ml
2016-03-19T22:59:04.400Z	35.9941	-97.1193	8km WNW of Perkins, Oklahoma	5.128	3.4	ml
2016-03-19T21:34:39.220Z	37.0948	-98.0283	6km S of Anthony, Kansas	6.27	3	ml
2016-03-19T20:28:54.300Z	36.6993	-98.6192	12km SSE of Alva, Oklahoma	7.195	3.2	ml
2016-03-18T19:57:01.300Z	35.4911	-96.9746	6km WSW of Meeker, Oklahoma	5.354	3	ml
2016-03-17T04:00:42.300Z	36.8279	-98.2815	10km NE of Cherokee, Oklahoma	5.663	3.1	ml
2016-03-17T03:34:18.200Z	36.8257	-98.2825	10km NE of Cherokee, Oklahoma	5.458	3.6	ml
2016-03-16T23:01:08.300Z	36.8337	-98.2972	10km NNE of Cherokee, Oklahoma	5.23	3	ml
2016-03-16T16:02:17.300Z	36.9164	-97.9872	25km WNW of Medford, Oklahoma	5.253	3.3	ml
2016-03-16T05:31:27.800Z	36.8392	-98.2791	11km NE of Cherokee, Oklahoma	5.454	3.2	ml
2016-03-15T10:12:45.600Z	36.6629	-97.2568	5km ESE of Tonkawa, Oklahoma	4.054	3.1	ml
2016-03-15T03:09:04.300Z	35.8207	-96.8144	14km NNE of Chandler, Oklahoma	5.967	3.3	ml
2016-03-14T10:17:22.400Z	36.8389	-98.2762	11km NE of Cherokee, Oklahoma	6.485	3.3	ml
2016-03-14T01:32:37.000Z	36.4685	-98.7485	32km NW of Fairview, Oklahoma	7.502	3.2	mwr
2016-03-13T03:43:47.400Z	36.6048	-97.7723	22km S of Medford, Oklahoma	7.35	3.4	ml
2016-03-12T01:55:02.200Z	36.373	-97.7223	14km E of Enid, Oklahoma	6.621	3.4	ml
2016-03-11T13:03:38.000Z	35.7874	-96.9892	13km NW of Chandler, Oklahoma	6.275	3.1	ml
2016-03-11T07:32:11.400Z	35.9822	-96.8066	3km W of Cushing, Oklahoma	5.307	3.2	ml
2016-03-10T23:47:24.600Z	36.284	-97.641	23km E of Waukomis, Oklahoma	6.087	3.2	ml
2016-03-10T23:42:19.490Z	36.287	-97.6458	22km E of Waukomis, Oklahoma	4.36	3.1	mb lg
2016-03-10T18:13:13.700Z	36.6753	-98.1644	17km NNE of Helena, Oklahoma	5.62	3	ml
2016-03-10T13:56:34.500Z	36.5132	-98.7147	32km S of Alva, Oklahoma	5.36	3.1	ml
2016-03-10T12:24:35.200Z	36.2776	-97.5113	20km W of Perry, Oklahoma	6.58	3.1	ml
2016-03-10T08:16:44.150Z	36.5179	-97.7399	18km NE of Enid, Oklahoma	3.19	3	mb lg
2016-03-09T07:08:01.300Z	35.5404	-97.3094	3km SW of Jones, Oklahoma	6.253	3	ml
2016-03-09T03:45:48.200Z	36.2793	-97.513	20km W of Perry, Oklahoma	6.816	3.3	ml
2016-03-08T22:22:57.100Z	35.6022	-97.123	9km SE of Luther, Oklahoma	5.588	3	ml
2016-03-08T09:28:42.000Z	35.9192	-97.3388	8km ENE of Guthrie, Oklahoma	6.219	3.7	ml
2016-03-07T00:43:36.400Z	36.471	-98.748	32km NW of Fairview, Oklahoma	5.997	3.6	mwr
2016-03-05T22:21:32.400Z	35.8629	-97.2123	9km SSE of Langston, Oklahoma	5	3	ml
2016-03-03T21:49:35.400Z	36.6381	-98.1437	15km NE of Helena, Oklahoma	6.049	3.1	ml
2016-03-03T18:09:18.200Z	36.2168	-97.291	8km S of Perry, Oklahoma	8.022	3	ml
2016-03-03T05:42:35.200Z	36.4612	-98.7611	33km NW of Fairview, Oklahoma	7.598	3.9	ml
2016-03-03T05:16:14.700Z	36.6688	-97.7403	15km S of Medford, Oklahoma	6.429	3	ml
2016-03-02T23:31:48.100Z	36.4751	-98.742	32km NW of Fairview, Oklahoma	7.222	3.9	mwr
2016-03-02T08:22:51.700Z	36.47	-98.758	33km NW of Fairview, Oklahoma	6.95	3	ml
2016-03-02T06:54:40.500Z	36.4626	-98.7591	33km NW of Fairview, Oklahoma	7.336	3.7	mwr
2016-03-02T06:05:30.600Z	36.6685	-97.7419	15km S of Medford, Oklahoma	6.648	3.1	ml
2016-03-01T23:08:56.100Z	35.7199	-97.1683	6km NNE of Luther, Oklahoma	5.351	3.4	ml
2016-02-29T09:53:54.700Z	36.5254	-98.9867	21km ENE of Mooreland, Oklahoma	6.91	3.3	ml
2016-02-29T09:35:05.300Z	36.5283	-98.9828	22km ENE of Mooreland, Oklahoma	7.331	3.6	ml
2016-02-29T01:58:31.900Z	35.6636	-97.3938	7km E of Edmond, Oklahoma	6.904	3	ml
2016-02-28T04:27:54.000Z	36.4282	-97.7232	14km ENE of Enid, Oklahoma	6.441	3	ml
2016-02-27T21:34:40.500Z	36.6671	-97.7431	15km S of Medford, Oklahoma	7.151	3	ml
2016-02-27T21:02:38.100Z	36.4736	-98.7528	33km NW of Fairview, Oklahoma	7.213	3.5	ml
2016-02-27T21:02:12.200Z	36.4711	-98.748	32km NW of Fairview, Oklahoma	7.281	3.3	ml

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Preparer: D. Horne; Date: 02/15/21
 Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2016-02-27T05:07:16.400Z	36.2875	-97.5202	20km W of Perry, Oklahoma	6.914	3.5	mwr
2016-02-27T05:05:49.300Z	36.287	-97.5192	20km W of Perry, Oklahoma	6.114	3.8	mwr
2016-02-26T10:30:49.400Z	36.1337	-98.8066	17km NE of Taloga, Oklahoma	6.937	3.4	ml
2016-02-26T09:52:44.600Z	35.6698	-97.4138	6km ENE of Edmond, Oklahoma	6.839	3.3	ml
2016-02-25T20:45:15.700Z	36.5297	-98.9767	22km ENE of Mooreland, Oklahoma	6.627	3.1	ml
2016-02-25T11:39:03.600Z	35.8763	-97.3093	9km SSW of Langston, Oklahoma	7.862	3.6	mwr
2016-02-25T09:55:31.300Z	35.7745	-97.4862	12km SSW of Guthrie, Oklahoma	7.177	3	ml
2016-02-24T11:29:47.100Z	35.6718	-97.4179	5km ENE of Edmond, Oklahoma	6.396	3.4	ml
2016-02-23T16:17:09.200Z	35.6651	-97.3943	7km E of Edmond, Oklahoma	6.837	3	ml
2016-02-23T14:16:19.100Z	35.6716	-97.393	7km ENE of Edmond, Oklahoma	7.199	3.2	ml
2016-02-23T09:37:38.200Z	35.6655	-97.4037	6km ENE of Edmond, Oklahoma	6.649	3	ml
2016-02-23T08:51:58.900Z	35.6617	-97.3941	7km E of Edmond, Oklahoma	6.261	3	ml
2016-02-23T08:44:33.500Z	35.6645	-97.4049	6km E of Edmond, Oklahoma	6.57	3.7	mwr
2016-02-23T02:35:15.500Z	35.6654	-97.4023	7km ENE of Edmond, Oklahoma	7.466	3.6	ml
2016-02-23T02:06:55.800Z	35.6633	-97.3977	7km E of Edmond, Oklahoma	7.048	3	ml
2016-02-23T00:48:45.700Z	35.6669	-97.3994	7km ENE of Edmond, Oklahoma	6.42	3.2	ml
2016-02-22T16:17:49.900Z	36.3366	-96.9858	16km W of Pawnee, Oklahoma	3.747	3	ml
2016-02-22T15:17:38.400Z	36.4546	-98.7768	33km NW of Fairview, Oklahoma	7.888	3.4	mwr
2016-02-22T06:56:51.500Z	35.9058	-97.4169	3km NNE of Guthrie, Oklahoma	5.984	3.1	ml
2016-02-21T05:11:14.600Z	36.406	-97.543	26km WNW of Perry, Oklahoma	4.078	3	ml
2016-02-21T02:02:05.900Z	35.7193	-97.1696	6km NNE of Luther, Oklahoma	5.495	3.2	ml
2016-02-20T15:16:10.500Z	36.259	-97.3568	7km WSW of Perry, Oklahoma	6.789	3	ml
2016-02-19T21:16:48.200Z	36.4775	-98.7433	33km NW of Fairview, Oklahoma	7.168	3.4	ml
2016-02-19T13:18:32.900Z	36.5322	-98.6839	30km S of Alva, Oklahoma	5	3.1	ml
2016-02-19T11:33:58.700Z	35.6644	-97.401	7km E of Edmond, Oklahoma	6.852	3.2	ml
2016-02-19T08:04:39.700Z	36.529	-98.6849	30km S of Alva, Oklahoma	5	3.5	ml
2016-02-18T14:33:01.000Z	35.721	-97.1672	7km NNE of Luther, Oklahoma	6.503	3.5	ml
2016-02-17T18:59:42.100Z	35.6626	-97.3902	8km E of Edmond, Oklahoma	6.802	3	ml
2016-02-17T18:15:02.500Z	35.7232	-97.1624	7km NNE of Luther, Oklahoma	5.777	3.4	ml
2016-02-17T08:32:16.000Z	36.4648	-98.7566	33km NW of Fairview, Oklahoma	2.273	3.1	ml
2016-02-17T08:31:39.900Z	36.4585	-98.7703	33km NW of Fairview, Oklahoma	7.308	3	ml
2016-02-17T08:16:49.400Z	35.7218	-97.1626	7km NNE of Luther, Oklahoma	5.83	3.3	ml
2016-02-17T01:19:05.300Z	36.4745	-98.7617	34km NW of Fairview, Oklahoma	7.594	3.1	ml
2016-02-16T23:04:38.200Z	36.4562	-98.7489	31km NW of Fairview, Oklahoma	1.101	3.3	ml
2016-02-16T04:20:07.000Z	35.7209	-97.1648	7km NNE of Luther, Oklahoma	5.399	3.1	ml
2016-02-15T21:44:32.100Z	36.2619	-97.3526	6km WSW of Perry, Oklahoma	7.6	3.3	ml
2016-02-15T19:27:31.900Z	36.4704	-98.7628	33km NW of Fairview, Oklahoma	7.355	3.2	ml
2016-02-15T03:45:00.200Z	36.4549	-98.7642	32km NW of Fairview, Oklahoma	7.263	3.2	ml
2016-02-15T01:52:25.200Z	36.4799	-98.7307	32km NW of Fairview, Oklahoma	4.653	3.2	ml
2016-02-14T22:42:58.600Z	36.472	-98.7511	33km NW of Fairview, Oklahoma	10.137	3.4	ml
2016-02-14T11:25:50.600Z	36.2831	-97.7101	16km E of Waukomis, Oklahoma	4.975	3.5	mwr
2016-02-14T10:41:54.000Z	36.4663	-98.75	32km NW of Fairview, Oklahoma	4.316	3.1	ml
2016-02-14T04:13:32.700Z	36.5082	-98.7089	33km S of Alva, Oklahoma	7.593	3.8	ml
2016-02-14T01:11:17.300Z	36.4673	-98.7589	33km NW of Fairview, Oklahoma	7.598	3.2	ml
2016-02-14T00:32:16.000Z	36.455	-98.7638	32km NW of Fairview, Oklahoma	5.781	3.7	ml
2016-02-13T21:59:03.700Z	36.466	-98.7563	33km NW of Fairview, Oklahoma	7.089	3	ml
2016-02-13T20:58:44.900Z	36.0624	-97.4841	15km NE of Crescent, Oklahoma	5.324	3.2	ml
2016-02-13T20:55:32.100Z	36.5244	-98.7027	31km S of Alva, Oklahoma	7.763	3.3	ml
2016-02-13T20:18:05.000Z	36.4648	-98.7596	33km NW of Fairview, Oklahoma	7.56	3	ml
2016-02-13T18:21:20.200Z	36.5188	-98.7021	31km S of Alva, Oklahoma	3.889	3.7	ml
2016-02-13T17:44:18.400Z	36.5013	-98.718	33km NW of Fairview, Oklahoma	7.714	3.4	ml
2016-02-13T17:25:52.500Z	36.8766	-97.789	9km NNW of Medford, Oklahoma	2.55	3.1	ml
2016-02-13T17:17:39.100Z	36.4812	-98.7392	33km NW of Fairview, Oklahoma	5	4	ml
2016-02-13T17:07:06.290Z	36.4898	-98.709	31km NW of Fairview, Oklahoma	8.31	5.1	mww
2016-02-11T19:49:13.400Z	36.4791	-98.7459	33km NW of Fairview, Oklahoma	7.118	3.1	ml
2016-02-11T18:32:58.800Z	36.4787	-98.7524	33km NW of Fairview, Oklahoma	9.702	3.2	ml
2016-02-11T13:18:24.400Z	36.5113	-99.0049	19km ENE of Mooreland, Oklahoma	3.596	3	ml
2016-02-10T20:57:35.540Z	37.0563	-97.8933	16km SE of Anthony, Kansas	7.12	3.1	ml
2016-02-09T15:38:58.400Z	36.2597	-96.748	10km SSE of Pawnee, Oklahoma	5.1	3.4	ml
2016-02-08T08:02:12.500Z	35.54	-97.3102	3km SW of Jones, Oklahoma	6.319	3.5	ml
2016-02-07T16:10:00.700Z	35.9748	-97.1792	7km ENE of Langston, Oklahoma	7.801	3.6	ml
2016-02-06T21:59:54.100Z	35.9734	-97.1795	7km ENE of Langston, Oklahoma	7.034	3.7	ml
2016-02-06T20:39:09.000Z	36.8274	-97.7746	4km WNW of Medford, Oklahoma	5.834	3.4	mwr

Table 2-3 - Revision 0
Historical Earthquakes in Oklahoma
Greater than 3.0 Magnitude
(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
 Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2016-02-06T09:19:18.100Z	35.9737	-97.1766	7km ENE of Langston, Oklahoma	6.962	3.1	ml
2016-02-06T09:13:47.600Z	35.9745	-97.1806	7km ENE of Langston, Oklahoma	7.74	3.1	ml
2016-02-05T16:09:30.200Z	36.5709	-97.8167	20km NNE of Enid, Oklahoma	6.884	3.5	ml
2016-02-05T16:06:24.000Z	36.57	-97.814	20km NNE of Enid, Oklahoma	5.37	3.1	ml
2016-02-05T13:21:43.600Z	36.1753	-97.2566	12km SSE of Perry, Oklahoma	7.369	3.1	ml
2016-02-05T11:38:50.000Z	36.3214	-97.5533	24km W of Perry, Oklahoma	5.668	3.1	ml
2016-02-04T20:27:39.700Z	35.9502	-97.3859	8km NNE of Guthrie, Oklahoma	6.315	3.3	ml
2016-02-03T23:11:28.000Z	36.8143	-97.622	9km E of Medford, Oklahoma	5.686	3.5	ml
2016-02-03T07:00:42.900Z	35.9553	-97.3684	9km NNE of Guthrie, Oklahoma	5.732	3.2	ml
2016-02-02T13:32:25.500Z	36.477	-98.7416	32km NW of Fairview, Oklahoma	7.46	3.4	ml
2016-02-02T02:29:57.600Z	36.4777	-98.7442	33km NW of Fairview, Oklahoma	7.137	3.6	ml
2016-02-01T09:45:23.600Z	36.1242	-97.0618	1km NNW of Stillwater, Oklahoma	6.929	3	ml
2016-01-31T08:56:46.400Z	36.3879	-96.7162	9km NE of Pawnee, Oklahoma	6.967	3.5	ml
2016-01-30T12:16:42.000Z	36.4861	-98.7349	33km NW of Fairview, Oklahoma	7.497	3	ml
2016-01-30T19:20:10.600Z	35.4149	-96.5568	10km SW of Boley, Oklahoma	4.565	3.1	ml
2016-01-29T21:58:07.600Z	36.4831	-98.7478	33km NW of Fairview, Oklahoma	7.811	3.6	ml
2016-01-29T20:45:22.100Z	36.4781	-98.7424	33km NW of Fairview, Oklahoma	2.924	3.2	ml
2016-01-29T20:27:47.700Z	36.4748	-98.7515	33km NW of Fairview, Oklahoma	7.989	3.4	ml
2016-01-29T17:47:12.000Z	36.4857	-98.7403	33km NW of Fairview, Oklahoma	8.215	3.4	ml
2016-01-28T16:33:07.400Z	36.5004	-97.0742	20km S of McCord, Oklahoma	7.222	3.5	mwr
2016-01-28T15:07:45.400Z	35.6915	-97.4648	4km NNE of Edmond, Oklahoma	5.888	3.1	ml
2016-01-28T00:50:33.300Z	36.758	-98.0688	25km E of Cherokee, Oklahoma	6.455	3.2	ml
2016-01-26T06:24:49.700Z	36.9178	-97.9822	25km WNW of Medford, Oklahoma	5	3.2	mwr
2016-01-25T10:05:43.300Z	35.8809	-97.337	7km E of Guthrie, Oklahoma	5	3	ml
2016-01-25T04:56:09.600Z	35.8812	-97.3329	8km E of Guthrie, Oklahoma	4.872	3.4	ml
2016-01-24T22:52:58.400Z	36.6625	-98.4647	14km SW of Cherokee, Oklahoma	11.241	3.3	ml
2016-01-24T18:19:40.800Z	36.9408	-97.8536	18km NW of Medford, Oklahoma	4.995	3	ml
2016-01-24T16:21:56.600Z	36.482	-98.7411	33km NW of Fairview, Oklahoma	5.901	3	ml
2016-01-24T10:01:40.800Z	36.9319	-97.6479	11km SSW of Caldwell, Kansas	3.778	3.5	mwr
2016-01-24T06:16:20.000Z	36.4499	-98.3717	14km SW of Helena, Oklahoma	6.284	3	ml
2016-01-23T03:40:26.800Z	36.4971	-98.7318	33km NW of Fairview, Oklahoma	7.742	3.1	ml
2016-01-22T12:41:24.000Z	36.8675	-97.9927	24km WNW of Medford, Oklahoma	5.599	3.1	ml
2016-01-22T11:45:55.900Z	36.76	-98.0517	27km E of Cherokee, Oklahoma	5.895	3.2	ml
2016-01-22T10:59:08.700Z	36.6028	-97.8279	23km N of Enid, Oklahoma	6.85	3.7	ml
2016-01-22T08:45:04.800Z	36.4832	-98.7273	32km NW of Fairview, Oklahoma	5.027	3	ml
2016-01-22T08:22:03.900Z	36.8342	-97.9888	22km W of Medford, Oklahoma	6.495	3	ml
2016-01-22T06:05:01.600Z	35.8962	-97.2489	5km S of Langston, Oklahoma	5.91	3.1	ml
2016-01-22T05:17:09.100Z	36.5248	-98.6902	31km S of Alva, Oklahoma	1.443	3.2	ml
2016-01-22T01:15:42.500Z	35.671	-97.4167	5km ENE of Edmond, Oklahoma	6.302	3.2	ml
2016-01-21T21:05:04.600Z	36.8347	-97.9844	22km W of Medford, Oklahoma	6.777	3	ml
2016-01-21T12:55:58.300Z	36.7924	-97.882	13km W of Medford, Oklahoma	5.594	3	ml
2016-01-21T08:27:58.400Z	36.5133	-98.6987	32km S of Alva, Oklahoma	5.692	3	ml
2016-01-20T08:55:58.000Z	35.7465	-97.3563	15km NE of Edmond, Oklahoma	5.936	3.6	ml
2016-01-20T04:41:57.400Z	36.4563	-97.7326	14km ENE of Enid, Oklahoma	7.766	3	ml
2016-01-19T23:57:07.300Z	36.827	-97.7697	3km NW of Medford, Oklahoma	4.45	3.3	ml
2016-01-19T20:45:57.700Z	36.507	-98.7135	33km S of Alva, Oklahoma	7.478	3.8	mwr
2016-01-19T19:41:57.200Z	36.5007	-98.7137	33km NW of Fairview, Oklahoma	6.357	3	ml
2016-01-18T16:41:56.300Z	35.9526	-97.3894	8km NNE of Guthrie, Oklahoma	6.882	3	ml
2016-01-18T12:55:56.900Z	36.2761	-98.4096	6km E of Fairview, Oklahoma	8.309	4.1	ml
2016-01-18T01:13:32.000Z	35.6719	-97.4155	6km ENE of Edmond, Oklahoma	6.381	3.2	ml
2016-01-17T08:51:55.600Z	36.0751	-97.2038	13km WSW of Stillwater, Oklahoma	7.869	3.3	ml
2016-01-17T00:59:31.200Z	36.8662	-97.9984	24km WNW of Medford, Oklahoma	4.99	3.5	ml
2016-01-16T22:37:51.200Z	36.7743	-97.8667	12km WSW of Medford, Oklahoma	5.92	3.1	ml
2016-01-16T00:36:51.200Z	36.4482	-98.3695	14km SW of Helena, Oklahoma	5.949	3	ml
2016-01-15T09:31:51.400Z	36.5851	-98.1352	12km ENE of Helena, Oklahoma	6.464	3	ml
2016-01-15T08:04:57.100Z	35.9593	-96.9113	11km E of Perkins, Oklahoma	4.088	3.6	ml
2016-01-15T03:29:24.300Z	36.9498	-97.8217	17km NNW of Medford, Oklahoma	5.729	3.1	ml
2016-01-15T02:06:30.400Z	36.9509	-97.8102	17km NNW of Medford, Oklahoma	5	3.3	ml
2016-01-14T23:15:31.900Z	36.939	-97.7972	15km NNW of Medford, Oklahoma	2.351	3.5	mwr
2016-01-14T22:41:39.100Z	36.7675	-97.7725	5km SW of Medford, Oklahoma	6.003	3.4	ml
2016-01-14T12:55:03.200Z	36.4803	-98.7542	34km NW of Fairview, Oklahoma	7.304	3.2	ml
2016-01-14T04:45:53.500Z	36.4813	-98.7485	33km NW of Fairview, Oklahoma	9.489	3.1	ml
2016-01-13T18:22:31.100Z	36.9535	-97.8334	18km NNW of Medford, Oklahoma	5.034	3	ml

Table 2-3 - Revision 0
Historical Earthquakes in Oklahoma
Greater than 3.0 Magnitude
(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
 Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2016-01-13T15:44:07.900Z	36.9368	-97.71	14km SW of Caldwell, Kansas	3.074	3.2	ml
2016-01-13T03:44:19.200Z	35.9516	-97.3918	8km NNE of Guthrie, Oklahoma	7.632	3.1	ml
2016-01-13T03:14:21.900Z	35.6646	-97.3928	7km E of Edmond, Oklahoma	6.593	3	ml
2016-01-11T15:18:06.200Z	36.5072	-98.7076	33km S of Alva, Oklahoma	6.609	3.4	ml
2016-01-11T14:16:12.200Z	36.4728	-98.756	33km NW of Fairview, Oklahoma	8.148	3.2	ml
2016-01-11T13:12:16.700Z	36.4723	-98.7575	33km NW of Fairview, Oklahoma	7.331	3	ml
2016-01-11T09:04:05.900Z	36.478	-98.7316	32km NW of Fairview, Oklahoma	5	3	ml
2016-01-11T04:17:32.800Z	36.4797	-98.7369	32km NW of Fairview, Oklahoma	5	3	ml
2016-01-11T02:01:54.100Z	36.4755	-98.7625	34km NW of Fairview, Oklahoma	8.363	3.4	mwr
2016-01-10T15:12:01.900Z	36.6065	-98.1003	16km ENE of Helena, Oklahoma	7.389	3.1	ml
2016-01-09T16:50:05.800Z	36.5164	-98.6953	32km S of Alva, Oklahoma	6.05	3	ml
2016-01-08T18:43:14.600Z	35.6632	-97.3914	7km E of Edmond, Oklahoma	6.675	3.5	ml
2016-01-08T17:50:04.100Z	36.5072	-98.7123	33km S of Alva, Oklahoma	7.828	3.5	ml
2016-01-08T17:08:42.800Z	36.711	-98.4298	8km SW of Cherokee, Oklahoma	3.629	3.1	ml
2016-01-08T16:57:48.800Z	36.5866	-98.4054	12km WNW of Helena, Oklahoma	7.407	3.1	ml
2016-01-08T16:46:49.200Z	36.4905	-98.7306	33km NW of Fairview, Oklahoma	7.465	3	ml
2016-01-08T14:01:56.100Z	36.5095	-98.7148	33km S of Alva, Oklahoma	7.532	3.9	ml
2016-01-08T13:36:29.000Z	36.5137	-98.7184	32km S of Alva, Oklahoma	10.447	3.8	mwr
2016-01-08T09:54:40.900Z	36.7305	-98.0145	26km WSW of Medford, Oklahoma	6.145	3.1	ml
2016-01-08T05:49:44.700Z	36.3087	-96.6483	14km ESE of Pawnee, Oklahoma	6.768	3	ml
2016-01-08T05:37:45.100Z	36.7064	-97.6317	14km SE of Medford, Oklahoma	5.33	3.5	ml
2016-01-08T01:53:30.800Z	36.4919	-98.7296	33km NW of Fairview, Oklahoma	7.703	3	ml
2016-01-08T00:10:03.600Z	36.4968	-98.7259	33km NW of Fairview, Oklahoma	7.717	3	ml
2016-01-07T19:59:44.500Z	36.5024	-98.7108	33km S of Alva, Oklahoma	5	3.7	mwr
2016-01-07T18:34:35.100Z	36.4707	-98.7527	33km NW of Fairview, Oklahoma	9.378	3.4	ml
2016-01-07T18:00:26.300Z	36.4698	-98.7479	32km NW of Fairview, Oklahoma	5.696	3.4	ml
2016-01-07T13:40:59.200Z	36.4819	-98.7491	33km NW of Fairview, Oklahoma	9.828	3.7	ml
2016-01-07T10:48:41.700Z	36.4805	-98.7499	33km NW of Fairview, Oklahoma	7.891	3.8	ml
2016-01-07T10:12:52.300Z	36.4747	-98.7422	32km NW of Fairview, Oklahoma	6.175	3.2	ml
2016-01-07T08:37:11.100Z	36.4754	-98.7342	32km NW of Fairview, Oklahoma	6.647	4.4	mwr
2016-01-07T08:06:15.100Z	36.4755	-98.7549	33km NW of Fairview, Oklahoma	8.698	3.9	ml
2016-01-07T08:02:30.900Z	36.5014	-98.723	33km NW of Fairview, Oklahoma	8.714	3.4	ml
2016-01-07T06:42:57.600Z	35.6574	-97.406	6km E of Edmond, Oklahoma	6.829	3	ml
2016-01-07T06:38:33.800Z	36.4843	-98.7372	33km NW of Fairview, Oklahoma	5.168	3.6	ml
2016-01-07T06:03:28.900Z	36.5226	-98.6992	31km S of Alva, Oklahoma	8.102	3.3	ml
2016-01-07T05:37:48.500Z	36.4815	-98.7475	33km NW of Fairview, Oklahoma	7.603	3.1	ml
2016-01-07T05:19:47.500Z	36.4843	-98.7382	33km NW of Fairview, Oklahoma	6.664	3.5	ml
2016-01-07T04:49:47.100Z	36.4794	-98.7423	33km NW of Fairview, Oklahoma	8.284	3.6	ml
2016-01-07T04:27:57.600Z	36.4955	-98.7254	33km NW of Fairview, Oklahoma	4.058	4.7	mww
2016-01-07T04:27:27.900Z	36.486	-98.7412	33km NW of Fairview, Oklahoma	7.093	4.4	mwr
2016-01-07T03:07:10.200Z	36.4901	-98.7294	33km NW of Fairview, Oklahoma	4.317	3.2	ml
2016-01-07T02:15:07.700Z	35.6689	-97.4037	6km ENE of Edmond, Oklahoma	6.229	3.5	ml
2016-01-06T15:26:12.200Z	36.4892	-98.7304	33km NW of Fairview, Oklahoma	7.195	3.9	ml
2016-01-06T12:51:12.200Z	35.6618	-97.4121	6km E of Edmond, Oklahoma	5.076	3.2	ml
2016-01-06T10:40:29.700Z	36.7302	-98.0189	26km WSW of Medford, Oklahoma	6.336	3.2	ml
2016-01-06T06:51:39.200Z	35.6621	-97.3902	8km E of Edmond, Oklahoma	5.336	3.2	ml
2016-01-06T06:19:25.300Z	36.4885	-98.7319	33km NW of Fairview, Oklahoma	9.409	4	ml
2016-01-06T01:17:05.400Z	35.6596	-97.3904	7km E of Edmond, Oklahoma	6.35	3	ml
2016-01-04T12:43:02.500Z	36.0733	-97.201	13km WSW of Stillwater, Oklahoma	9.143	3.4	ml
2016-01-04T12:23:24.500Z	36.0734	-97.2023	13km WSW of Stillwater, Oklahoma	11.517	3.5	ml
2016-01-04T10:20:59.100Z	36.0727	-97.2042	13km WSW of Stillwater, Oklahoma	10.367	3.4	ml
2016-01-04T09:45:04.100Z	36.0706	-97.2026	13km WSW of Stillwater, Oklahoma	11.605	3.3	ml
2016-01-03T21:38:49.200Z	36.0695	-97.214	14km WSW of Stillwater, Oklahoma	4.965	3.3	ml
2016-01-03T20:56:29.000Z	36.0702	-97.2056	14km WSW of Stillwater, Oklahoma	9.838	3.1	ml
2016-01-02T21:04:34.500Z	36.2754	-97.4586	15km W of Perry, Oklahoma	6.582	3.3	ml
2016-01-02T20:26:40.400Z	35.7431	-97.3569	14km NE of Edmond, Oklahoma	6.662	3.3	mwr
2016-01-02T13:46:06.500Z	36.277	-97.4544	15km W of Perry, Oklahoma	6.501	3.1	ml
2016-01-02T05:08:11.500Z	36.8214	-97.7101	2km NE of Medford, Oklahoma	5.561	3	ml
2016-01-02T00:02:38.100Z	36.4865	-98.7376	33km NW of Fairview, Oklahoma	7.779	3	ml
2016-01-01T23:15:58.850Z	35.9688	-97.4016	10km NNE of Guthrie, Oklahoma	5	3.2	mb lg
2016-01-01T22:40:26.600Z	35.9533	-97.3969	8km NNE of Guthrie, Oklahoma	6.886	3.1	ml
2016-01-01T22:08:04.700Z	35.6661	-97.3992	7km ENE of Edmond, Oklahoma	6.696	3	ml
2016-01-01T20:28:07.600Z	35.8209	-97.4362	6km S of Guthrie, Oklahoma	5.632	3.4	ml

Table 2-3 - Revision 0
Historical Earthquakes in Oklahoma
Greater than 3.0 Magnitude
(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2016-01-01T11:39:39.800Z	35.6688	-97.4065	6km ENE of Edmond, Oklahoma	5.825	4.2	mwr
2016-01-01T11:25:04.500Z	36.8042	-97.8514	10km W of Medford, Oklahoma	5.454	3	ml
2015-12-31T11:35:26.400Z	36.6123	-98.8055	24km SSW of Alva, Oklahoma	6.285	3.2	ml
2015-12-31T03:26:38.500Z	36.8328	-97.7676	4km NW of Medford, Oklahoma	5.41	3	ml
2015-12-30T18:13:45.400Z	35.6648	-97.4018	7km E of Edmond, Oklahoma	7.184	3	ml
2015-12-30T11:22:48.500Z	35.9428	-97.2997	4km W of Langston, Oklahoma	7.69	3.2	ml
2015-12-30T07:32:48.600Z	35.6656	-97.399	7km ENE of Edmond, Oklahoma	5.994	3.1	ml
2015-12-30T06:00:10.700Z	36.5904	-98.3799	10km WNW of Helena, Oklahoma	5.458	3.3	ml
2015-12-30T03:45:08.200Z	36.729	-98.0094	26km WSW of Medford, Oklahoma	6.625	3.7	ml
2015-12-29T22:17:47.900Z	35.9424	-97.2991	3km W of Langston, Oklahoma	6.66	3.3	ml
2015-12-29T21:40:47.000Z	35.6702	-97.4075	6km ENE of Edmond, Oklahoma	6.254	3.3	ml
2015-12-29T20:27:25.500Z	35.6632	-97.3978	7km E of Edmond, Oklahoma	6.286	3	ml
2015-12-29T20:24:42.800Z	36.5036	-98.8963	28km ENE of Mooreland, Oklahoma	15.73	3	mb lg
2015-12-29T18:47:08.700Z	35.6636	-97.4002	7km E of Edmond, Oklahoma	6.717	3.3	ml
2015-12-29T18:00:32.300Z	35.6664	-97.4052	6km ENE of Edmond, Oklahoma	6.531	3	ml
2015-12-29T12:48:14.100Z	36.4455	-98.7997	34km NW of Fairview, Oklahoma	4.985	3.1	ml
2015-12-29T11:51:02.600Z	35.6713	-97.413	6km ENE of Edmond, Oklahoma	5.967	3.3	ml
2015-12-29T11:49:23.900Z	35.6694	-97.411	6km ENE of Edmond, Oklahoma	6.128	3.5	ml
2015-12-29T11:39:19.200Z	35.6654	-97.4054	6km ENE of Edmond, Oklahoma	6.532	4.3	mwr
2015-12-29T03:22:35.300Z	36.8343	-98.281	11km NE of Cherokee, Oklahoma	4.669	3	ml
2015-12-28T16:21:32.500Z	36.2902	-97.1243	14km E of Perry, Oklahoma	4.167	3.2	ml
2015-12-28T15:52:56.600Z	36.2629	-97.3543	6km WSW of Perry, Oklahoma	7.669	3.4	ml
2015-12-28T09:02:20.400Z	36.458	-98.7686	33km NW of Fairview, Oklahoma	7.239	3	ml
2015-12-28T03:59:30.600Z	35.6693	-97.4048	6km ENE of Edmond, Oklahoma	5	3.7	ml
2015-12-28T00:36:30.000Z	35.586	-97.3737	7km N of Spencer, Oklahoma	6.08	3.4	ml
2015-12-27T13:18:58.800Z	36.834	-97.7922	6km WNW of Medford, Oklahoma	5	3.5	ml
2015-12-26T19:41:17.800Z	35.5891	-97.3829	7km N of Spencer, Oklahoma	6.099	3.2	ml
2015-12-26T19:40:15.700Z	35.5894	-97.3805	7km N of Spencer, Oklahoma	6.07	3	ml
2015-12-26T05:35:05.700Z	36.0603	-97.5525	12km NNE of Crescent, Oklahoma	5.868	3	ml
2015-12-25T19:12:25.400Z	36.7287	-98.0118	26km WSW of Medford, Oklahoma	6.212	3.6	mwr
2015-12-25T13:45:26.600Z	36.7313	-98.0116	26km WSW of Medford, Oklahoma	5.127	3.1	ml
2015-12-24T22:21:41.900Z	35.8223	-97.4228	6km S of Guthrie, Oklahoma	2.803	3	ml
2015-12-24T15:14:55.100Z	35.8186	-97.425	6km S of Guthrie, Oklahoma	5.855	3.4	ml
2015-12-24T15:13:34.600Z	35.8186	-97.4268	6km S of Guthrie, Oklahoma	6.359	3.2	ml
2015-12-24T04:40:37.500Z	36.4861	-98.5029	21km WSW of Helena, Oklahoma	3.854	3.3	ml
2015-12-24T04:10:47.900Z	36.7598	-98.0725	25km E of Cherokee, Oklahoma	6.521	3.3	ml
2015-12-23T07:35:11.200Z	36.7123	-97.5674	18km SE of Medford, Oklahoma	6.33	3	ml
2015-12-23T03:04:00.300Z	36.9488	-97.8446	18km NNW of Medford, Oklahoma	3.315	3.3	ml
2015-12-23T00:45:32.100Z	36.7599	-98.0722	25km E of Cherokee, Oklahoma	6.433	3.3	ml
2015-12-22T19:15:53.900Z	36.7577	-98.0696	25km E of Cherokee, Oklahoma	6.443	3	ml
2015-12-22T16:39:09.500Z	35.7432	-97.3532	15km NE of Edmond, Oklahoma	5.58	3.5	ml
2015-12-21T02:32:57.400Z	36.4869	-98.7262	32km NW of Fairview, Oklahoma	5	3	ml
2015-12-20T16:18:58.600Z	36.5387	-97.1875	18km SE of Tonkawa, Oklahoma	6.424	3	ml
2015-12-19T01:37:15.100Z	36.7012	-97.986	25km WSW of Medford, Oklahoma	6.822	3.3	ml
2015-12-18T18:45:00.900Z	35.8944	-96.7415	10km SSE of Cushing, Oklahoma	4.904	3.2	ml
2015-12-18T08:06:07.100Z	36.1196	-97.636	18km NNW of Crescent, Oklahoma	5	3.3	ml
2015-12-18T04:09:24.300Z	36.4971	-98.7304	33km NW of Fairview, Oklahoma	6.519	3.6	ml
2015-12-18T02:35:04.100Z	36.2926	-97.5186	20km W of Perry, Oklahoma	6.634	3.4	ml
2015-12-18T02:03:25.100Z	35.9869	-96.799	2km W of Cushing, Oklahoma	5.563	3.7	ml
2015-12-17T15:56:06.300Z	36.2121	-97.5533	25km WSW of Perry, Oklahoma	5.952	3.4	ml
2015-12-17T05:56:11.400Z	35.9916	-97.2294	5km NNE of Langston, Oklahoma	5.588	3.1	ml
2015-12-16T09:20:34.700Z	35.6173	-97.0863	11km ESE of Luther, Oklahoma	5.801	3.4	ml
2015-12-15T22:56:07.900Z	36.2125	-97.5543	25km WSW of Perry, Oklahoma	6.153	3.2	ml
2015-12-15T20:42:07.600Z	36.5302	-98.5909	28km W of Helena, Oklahoma	4.64	3.2	ml
2015-12-15T16:49:11.400Z	36.7654	-98.0543	27km E of Cherokee, Oklahoma	6.29	3.3	ml
2015-12-15T09:57:48.800Z	36.2129	-97.554	25km WSW of Perry, Oklahoma	6.119	3.2	ml
2015-12-15T01:07:48.900Z	36.7462	-98.127	20km E of Cherokee, Oklahoma	6.32	3.1	ml
2015-12-14T06:54:41.500Z	36.2836	-97.5096	19km W of Perry, Oklahoma	6.583	3.2	ml
2015-12-13T21:00:07.500Z	36.2803	-97.5159	20km W of Perry, Oklahoma	7.584	3	ml
2015-12-13T15:24:14.500Z	36.8675	-98.0032	24km WNW of Medford, Oklahoma	5.778	3	ml
2015-12-12T17:40:40.900Z	36.4466	-97.1198	23km NE of Perry, Oklahoma	6.667	3.4	ml
2015-12-12T12:39:57.900Z	36.28	-97.4563	15km W of Perry, Oklahoma	8.016	3.1	ml
2015-12-10T23:21:45.300Z	36.2624	-97.357	6km WSW of Perry, Oklahoma	7.99	3.3	ml

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(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2015-12-09T23:12:01.400Z	36.6037	-98.3492	9km NW of Helena, Oklahoma	3.966	3.3	ml
2015-12-09T02:14:05.600Z	36.7615	-97.6104	12km ESE of Medford, Oklahoma	6.409	3	ml
2015-12-08T02:04:39.400Z	36.9531	-97.8029	17km NNW of Medford, Oklahoma	3.856	3.5	ml
2015-12-08T00:30:30.300Z	36.9466	-97.8224	17km NNW of Medford, Oklahoma	4.862	3.4	ml
2015-12-08T00:29:49.800Z	36.9432	-97.8095	16km NNW of Medford, Oklahoma	3.83	3	ml
2015-12-08T00:25:42.500Z	36.9373	-97.8253	16km NNW of Medford, Oklahoma	8.096	3.4	ml
2015-12-08T00:08:30.600Z	36.9451	-97.815	16km NNW of Medford, Oklahoma	3.913	3.5	mwr
2015-12-06T18:29:50.700Z	36.7599	-98.0659	25km E of Cherokee, Oklahoma	6.637	3.5	ml
2015-12-06T18:25:37.300Z	35.8485	-96.6504	11km N of Stroud, Oklahoma	4.625	3.1	ml
2015-12-06T03:04:36.700Z	36.466	-98.7523	32km NW of Fairview, Oklahoma	4.099	3.1	ml
2015-12-06T01:01:41.900Z	36.4703	-98.7606	33km NW of Fairview, Oklahoma	6.126	4	mwr
2015-12-05T21:44:36.000Z	36.2	-97.4277	16km SW of Pery, Oklahoma	6.122	3.4	ml
2015-12-05T01:14:18.900Z	34.8037	-97.8063	13km E of Rush Springs, Oklahoma	10.507	3.1	ml
2015-12-04T22:17:57.800Z	36.6136	-98.0533	20km ENE of Helena, Oklahoma	5.975	3.2	ml
2015-12-04T15:17:53.300Z	36.7635	-98.055	26km E of Cherokee, Oklahoma	6.234	3.1	ml
2015-12-04T05:08:12.900Z	36.8315	-98.2737	11km NE of Cherokee, Oklahoma	4.986	3.2	mwr
2015-12-04T00:27:40.500Z	36.7605	-98.0523	27km E of Cherokee, Oklahoma	6.714	3.6	ml
2015-12-02T19:40:30.000Z	36.8265	-98.2839	10km NE of Cherokee, Oklahoma	5.307	3.4	ml
2015-12-02T06:19:59.700Z	36.7586	-98.0656	26km E of Cherokee, Oklahoma	6.77	3.1	ml
2015-12-01T17:36:39.100Z	36.7353	-98.7485	10km SW of Alva, Oklahoma	3.18	3	ml
2015-12-01T17:34:35.300Z	36.5074	-98.7109	33km S of Alva, Oklahoma	1.255	3.1	ml
2015-12-01T00:46:31.900Z	36.6562	-98.4644	14km SW of Cherokee, Oklahoma	7.922	3.2	ml
2015-11-30T21:28:44.400Z	36.9443	-97.8309	17km NNW of Medford, Oklahoma	5.264	3.3	mwr
2015-11-30T19:47:11.400Z	36.3457	-99.2157	10km S of Mooreland, Oklahoma	2.981	3.3	ml
2015-11-30T13:00:55.300Z	36.2814	-97.5075	19km W of Pery, Oklahoma	11.418	3.2	ml
2015-11-30T11:50:15.000Z	35.6679	-97.3949	7km ENE of Edmond, Oklahoma	5.448	3.2	ml
2015-11-30T09:49:12.800Z	36.7509	-98.0561	26km E of Cherokee, Oklahoma	5.629	4.7	mwr
2015-11-29T10:17:42.400Z	36.5082	-99.029	17km ENE of Mooreland, Oklahoma	6.333	3	ml
2015-11-26T09:08:44.000Z	36.9559	-97.8262	18km NNW of Medford, Oklahoma	6.286	3.2	ml
2015-11-26T09:04:55.700Z	36.382	-98.2791	18km S of Helena, Oklahoma	2.752	3	ml
2015-11-26T05:14:50.500Z	36.3304	-97.7317	15km ESE of Enid, Oklahoma	5.466	3	ml
2015-11-26T05:06:37.200Z	36.3316	-97.7259	15km ESE of Enid, Oklahoma	5.438	3.1	ml
2015-11-26T00:56:02.500Z	36.9459	-97.8108	16km NNW of Medford, Oklahoma	4.784	3.1	mwr
2015-11-26T00:32:48.800Z	36.9465	-97.8139	17km NNW of Medford, Oklahoma	5.439	3.3	ml
2015-11-25T17:57:45.800Z	35.8638	-96.8725	16km SW of Cushing, Oklahoma	5.213	3	ml
2015-11-25T14:02:02.300Z	36.9448	-97.8125	16km NNW of Medford, Oklahoma	4.103	3.3	ml
2015-11-25T00:43:50.800Z	36.8393	-98.2691	12km NE of Cherokee, Oklahoma	4.864	4.1	mb
2015-11-24T02:47:40.600Z	36.8152	-98.2767	9km NE of Cherokee, Oklahoma	5.942	3	ml
2015-11-24T01:13:55.200Z	36.8134	-98.2758	9km NE of Cherokee, Oklahoma	6.835	3.1	ml
2015-11-24T00:54:18.200Z	36.8179	-98.2846	9km NE of Cherokee, Oklahoma	5.517	3.3	mwr
2015-11-23T21:36:18.400Z	36.8326	-98.2905	10km NE of Cherokee, Oklahoma	4.266	3.8	ml
2015-11-23T21:17:46.500Z	36.8382	-98.2762	11km NE of Cherokee, Oklahoma	5.028	4.4	mwr
2015-11-23T18:31:01.000Z	36.6528	-98.4777	15km SW of Cherokee, Oklahoma	7.427	3.2	ml
2015-11-22T08:12:32.100Z	36.6596	-98.4593	13km SW of Cherokee, Oklahoma	6.981	3	ml
2015-11-21T14:04:13.600Z	36.945	-97.819	17km NNW of Medford, Oklahoma	4.068	3	ml
2015-11-20T23:09:28.400Z	36.6619	-98.4609	13km SW of Cherokee, Oklahoma	7.995	3.4	ml
2015-11-20T22:55:51.200Z	36.9413	-97.8259	17km NNW of Medford, Oklahoma	3.555	3.5	mwr
2015-11-20T22:53:47.900Z	36.9456	-97.8471	18km NNW of Medford, Oklahoma	4.878	3.5	ml
2015-11-20T22:40:40.300Z	36.9483	-97.8276	17km NNW of Medford, Oklahoma	5	4.1	mwr
2015-11-20T21:11:13.800Z	36.7607	-98.0745	25km E of Cherokee, Oklahoma	6.697	3.4	ml
2015-11-20T15:42:32.400Z	36.5143	-98.6089	29km NNW of Fairview, Oklahoma	5	3.3	ml
2015-11-20T12:07:45.300Z	36.6547	-98.4654	14km SW of Cherokee, Oklahoma	5.727	3	ml
2015-11-20T11:22:05.100Z	36.6534	-98.4733	15km SW of Cherokee, Oklahoma	7.096	3.5	ml
2015-11-20T08:06:01.900Z	36.5129	-98.6097	29km NNW of Fairview, Oklahoma	4.934	3.4	ml
2015-11-20T06:12:49.900Z	36.6535	-98.4719	15km SW of Cherokee, Oklahoma	6.69	3.7	ml
2015-11-19T14:24:58.800Z	36.0788	-97.5686	14km N of Crescent, Oklahoma	4.488	3.7	mwr
2015-11-19T13:25:10.600Z	36.071	-97.5836	13km N of Crescent, Oklahoma	4.87	3.2	ml
2015-11-19T12:03:10.000Z	36.6563	-98.4682	14km SW of Cherokee, Oklahoma	7.009	3.3	mwr
2015-11-19T09:46:22.000Z	36.6561	-98.4614	14km SW of Cherokee, Oklahoma	10.294	3.2	ml
2015-11-19T07:42:12.000Z	36.6602	-98.4594	13km SW of Cherokee, Oklahoma	5.914	4.7	mwr
2015-11-19T03:34:05.500Z	36.2833	-97.7102	16km E of Waukomis, Oklahoma	5.834	3	ml
2015-11-18T12:08:40.000Z	36.1212	-97.6437	19km NNW of Crescent, Oklahoma	4.858	3.4	mwr
2015-11-18T03:22:41.900Z	36.7759	-97.7622	4km SW of Medford, Oklahoma	6.033	3.2	ml

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Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2015-11-17T16:50:49.800Z	36.3686	-97.1309	16km ENE of Perry, Oklahoma	3.339	3.1	ml
2015-11-15T09:45:31.300Z	36.4696	-98.7549	33km NW of Fairview, Oklahoma	5.109	4.3	mwr
2015-11-14T16:40:46.400Z	36.1991	-97.4882	20km WSW of Perry, Oklahoma	6.399	3.1	ml
2015-11-13T20:47:22.500Z	36.6941	-98.2615	10km SE of Cherokee, Oklahoma	6.218	3.1	ml
2015-11-13T01:51:16.800Z	36.9516	-97.8307	18km NNW of Medford, Oklahoma	2.703	3.4	ml
2015-11-12T10:48:13.200Z	36.9661	-97.8492	20km NNW of Medford, Oklahoma	5.457	3	ml
2015-11-12T09:24:27.200Z	35.9197	-97.3397	8km ENE of Guthrie, Oklahoma	5.495	3	ml
2015-11-11T14:54:55.900Z	35.674	-97.3996	7km ENE of Edmond, Oklahoma	5.986	3.4	ml
2015-11-11T10:38:16.900Z	36.6949	-98.2619	10km SE of Cherokee, Oklahoma	6.004	3.4	ml
2015-11-11T01:46:50.100Z	36.9482	-97.8084	17km NNW of Medford, Oklahoma	1.118	3	ml
2015-11-11T01:39:03.600Z	36.9471	-97.8262	17km NNW of Medford, Oklahoma	2.143	3.5	mwr
2015-11-10T23:12:45.900Z	36.6716	-97.7326	15km S of Medford, Oklahoma	5.015	3.1	ml
2015-11-10T19:16:01.500Z	36.9447	-97.8257	17km NNW of Medford, Oklahoma	5	3	ml
2015-11-10T19:13:38.200Z	36.9435	-97.8231	17km NNW of Medford, Oklahoma	3.434	3.5	ml
2015-11-10T14:02:18.400Z	36.9507	-97.8335	18km NNW of Medford, Oklahoma	0.113	3.7	ml
2015-11-10T13:36:45.600Z	35.9825	-96.8077	3km W of Cushing, Oklahoma	4.339	3.3	mwr
2015-11-10T13:11:29.300Z	36.4721	-98.7516	33km NW of Fairview, Oklahoma	2.091	3.2	ml
2015-11-10T08:23:55.800Z	36.7543	-98.0791	24km E of Cherokee, Oklahoma	6.1	3.5	ml
2015-11-10T01:37:50.500Z	36.3193	-97.5538	24km W of Perry, Oklahoma	6.25	3.5	ml
2015-11-09T22:42:06.600Z	37.1223	-97.6172	10km N of Caldwell, Kansas	4.27	3.6	mwr
2015-11-09T10:18:09.900Z	36.7605	-98.0766	25km E of Cherokee, Oklahoma	6.516	3.7	ml
2015-11-09T06:17:42.600Z	36.8489	-97.6892	6km NE of Medford, Oklahoma	5	3	ml
2015-11-08T19:59:06.000Z	35.9803	-96.8185	4km W of Cushing, Oklahoma	4.192	3.5	ml
2015-11-08T08:29:00.000Z	36.9466	-97.836	17km NNW of Medford, Oklahoma	2.954	3.4	ml
2015-11-08T04:04:21.800Z	36.9506	-97.8375	18km NNW of Medford, Oklahoma	3.666	3.5	ml
2015-11-07T23:43:27.900Z	36.9439	-97.8401	17km NNW of Medford, Oklahoma	4.734	3.6	ml
2015-11-07T22:13:18.700Z	36.9498	-97.8386	18km NNW of Medford, Oklahoma	3.207	3.5	ml
2015-11-07T21:07:31.000Z	36.6241	-97.7214	20km S of Medford, Oklahoma	4.963	3.4	ml
2015-11-07T20:10:55.800Z	36.9412	-97.8353	17km NNW of Medford, Oklahoma	2.149	3	ml
2015-11-07T19:27:33.100Z	36.6554	-98.7167	17km SSW of Alva, Oklahoma	3.159	3	ml
2015-11-07T19:20:09.300Z	36.9439	-97.843	18km NNW of Medford, Oklahoma	5	3.1	ml
2015-11-07T18:40:58.000Z	36.9482	-97.8369	18km NNW of Medford, Oklahoma	5	3.1	ml
2015-11-07T18:29:13.400Z	36.9468	-97.8368	18km NNW of Medford, Oklahoma	3.905	3.8	mwr
2015-11-07T11:31:18.500Z	36.9499	-97.8361	18km NNW of Medford, Oklahoma	4.856	3	ml
2015-11-07T11:11:53.900Z	36.9528	-97.8552	19km NNW of Medford, Oklahoma	5	4.1	mwr
2015-11-07T05:30:10.100Z	36.4238	-97.3357	15km NNW of Perry, Oklahoma	5	3	ml
2015-11-07T04:50:08.500Z	36.2639	-97.2395	5km ESE of Perry, Oklahoma	3.81	3.5	mb lg
2015-11-04T16:38:48.800Z	36.9444	-97.8404	17km NNW of Medford, Oklahoma	2.642	3.2	ml
2015-11-04T15:16:39.200Z	36.9436	-97.8458	18km NNW of Medford, Oklahoma	2.888	3.2	ml
2015-11-04T02:48:06.400Z	36.2977	-97.1748	10km E of Perry, Oklahoma	9.759	3	ml
2015-11-03T17:55:08.600Z	36.3207	-97.5524	23km W of Perry, Oklahoma	3.917	3.1	ml
2015-11-03T16:32:03.500Z	35.9135	-97.2423	3km SSE of Langston, Oklahoma	6.601	3.3	ml
2015-11-03T16:22:47.600Z	36.7665	-98.0791	24km E of Cherokee, Oklahoma	5.864	3.2	ml
2015-11-02T17:44:14.500Z	35.9199	-97.3269	7km WSW of Langston, Oklahoma	5	3	ml
2015-11-02T17:35:39.400Z	35.9181	-97.3303	7km WSW of Langston, Oklahoma	7.158	3.7	ml
2015-11-02T16:57:36.700Z	35.9198	-97.3312	7km WSW of Langston, Oklahoma	5.373	3.9	mwr
2015-10-31T06:14:04.900Z	35.9872	-96.7981	2km W of Cushing, Oklahoma	4.66	3.5	ml
2015-10-30T21:37:58.600Z	36.7355	-98.752	10km SW of Alva, Oklahoma	4.242	3.3	ml
2015-10-30T20:20:30.00Z	36.0739	-97.5736	13km N of Crescent, Oklahoma	4.673	3.6	mwr
2015-10-30T16:52:43.600Z	36.7804	-98.652	3km SSE of Alva, Oklahoma	1.61	3.1	ml
2015-10-30T11:37:06.300Z	35.8561	-97.3552	6km ESE of Guthrie, Oklahoma	5.828	3.2	ml
2015-10-30T04:37:02.220Z	37.1523	-97.6225	13km N of Caldwell, Kansas	4.62	3.4	mwr
2015-10-29T05:43:35.100Z	36.4256	-97.3401	15km NNW of Perry, Oklahoma	1.102	3	ml
2015-10-29T05:26:56.500Z	36.134	-97.3028	17km S of Perry, Oklahoma	1.936	3.3	ml
2015-10-29T01:20:47.100Z	35.8619	-97.3546	6km ESE of Guthrie, Oklahoma	3.84	3.5	ml
2015-10-28T11:59:54.000Z	36.7023	-97.6965	12km SSE of Medford, Oklahoma	0.106	3.1	ml
2015-10-27T21:03:56.000Z	36.6553	-98.7187	17km SSW of Alva, Oklahoma	3.516	3.3	ml
2015-10-27T15:44:41.200Z	36.1762	-97.3871	15km SW of Perry, Oklahoma	4.798	3.1	ml
2015-10-27T10:48:59.700Z	36.2139	-97.5708	26km WSW of Perry, Oklahoma	5	3	ml
2015-10-27T09:13:35.100Z	36.8285	-97.7887	5km WNW of Medford, Oklahoma	2.531	3.4	ml
2015-10-27T03:06:49.380Z	37.1217	-97.6213	10km N of Caldwell, Kansas	4.02	3.6	ml
2015-10-27T02:21:47.500Z	37.122	-97.6177	10km N of Caldwell, Kansas	3.87	3.3	ml
2015-10-26T06:34:00.900Z	36.3662	-97.7008	16km ESE of Enid, Oklahoma	5	3.4	ml

Table 2-3 - Revision 0
Historical Earthquakes in Oklahoma
Greater than 3.0 Magnitude
(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2015-10-25T05:05:14.100Z	36.1857	-98.811	21km NE of Taloga, Oklahoma	7.132	3	ml
2015-10-24T22:08:09.000Z	36.8302	-97.7883	5km WNW of Medford, Oklahoma	5.446	3.5	ml
2015-10-24T21:13:07.800Z	36.8304	-97.7932	5km WNW of Medford, Oklahoma	5.308	3.2	ml
2015-10-24T16:27:02.430Z	37.2292	-97.9598	8km SE of Harper, Kansas	2.72	3	ml
2015-10-24T05:57:56.500Z	36.7833	-97.5441	17km E of Medford, Oklahoma	5.562	3.2	ml
2015-10-22T01:33:33.200Z	36.9385	-98.0212	23km S of Anthony, Kansas	5.904	3.1	ml
2015-10-19T15:42:09.500Z	36.8989	-97.6529	12km NE of Medford, Oklahoma	5	3.2	ml
2015-10-19T05:22:51.000Z	36.761	-98.0721	25km E of Cherokee, Oklahoma	4.089	3.2	ml
2015-10-19T04:55:29.400Z	36.7346	-97.8401	12km SW of Medford, Oklahoma	5.648	3.1	mwr
2015-10-19T00:08:50.650Z	37.1192	-97.6185	9km N of Caldwell, Kansas	3.79	3	ml
2015-10-18T05:07:34.200Z	35.8532	-97.3492	7km ESE of Guthrie, Oklahoma	5.582	3.1	ml
2015-10-18T03:12:51.700Z	35.853	-97.35	7km ESE of Guthrie, Oklahoma	5.8	3.3	ml
2015-10-17T13:20:00.640Z	37.0575	-97.934	13km SE of Anthony, Kansas	5.82	3.4	mwr
2015-10-17T12:12:49.970Z	37.0537	-97.9413	13km SE of Anthony, Kansas	6.21	3.4	mwr
2015-10-17T10:15:13.000Z	35.9768	-96.8208	4km W of Cushing, Oklahoma	4.29	3	ml
2015-10-15T11:28:02.500Z	36.7589	-98.0695	25km E of Cherokee, Oklahoma	6.489	3	ml
2015-10-15T07:32:19.100Z	36.1819	-97.367	13km SSW of Perry, Oklahoma	6.512	3.1	ml
2015-10-15T06:50:03.100Z	35.8566	-97.3464	7km ESE of Guthrie, Oklahoma	4.847	3.5	ml
2015-10-14T23:56:26.100Z	36.3469	-96.7753	2km ENE of Pawnee, Oklahoma	5	3	ml
2015-10-14T22:27:20.300Z	36.0745	-97.5824	13km N of Crescent, Oklahoma	4.494	3.4	ml
2015-10-14T02:18:36.300Z	35.9978	-96.7698	1km N of Cushing, Oklahoma	0.445	3.1	ml
2015-10-13T18:51:06.000Z	36.2783	-97.5121	20km W of Perry, Oklahoma	8.378	3.2	ml
2015-10-12T22:52:06.300Z	36.5742	-97.0936	12km SSW of McCord, Oklahoma	7.696	3.4	ml
2015-10-12T17:11:35.300Z	36.5688	-97.0992	13km SSW of McCord, Oklahoma	4.868	3	ml
2015-10-12T14:11:16.000Z	36.329	-96.7763	2km ESE of Pawnee, Oklahoma	5.697	3	ml
2015-10-12T10:22:58.480Z	37.2128	-97.9815	7km NNE of Anthony, Kansas	4.35	3	ml
2015-10-12T09:33:48.900Z	36.2842	-97.504	19km W of Perry, Oklahoma	5	3.2	ml
2015-10-12T08:29:27.600Z	36.7611	-98.0692	25km E of Cherokee, Oklahoma	6.378	3.3	ml
2015-10-11T23:46:15.750Z	37.0568	-97.9338	13km SE of Anthony, Kansas	5.95	3	ml
2015-10-11T10:27:13.700Z	36.3205	-97.5574	24km W of Perry, Oklahoma	7.824	3.5	mwr
2015-10-11T08:49:51.300Z	36.5908	-98.3872	11km WNW of Helena, Oklahoma	5	3.3	ml
2015-10-10T23:43:22.800Z	35.9781	-96.8184	4km W of Cushing, Oklahoma	4.689	3.3	ml
2015-10-10T22:20:55.400Z	35.9897	-96.7828	1km WNW of Cushing, Oklahoma	4.474	3	ml
2015-10-10T22:07:05.400Z	35.9862	-96.7981	2km W of Cushing, Oklahoma	4.694	3.1	ml
2015-10-10T22:03:05.300Z	35.986	-96.8032	3km W of Cushing, Oklahoma	3.274	4.3	mwr
2015-10-10T15:20:48.300Z	36.7234	-97.9299	19km WSW of Medford, Oklahoma	5.716	3.5	mwr
2015-10-10T09:20:43.000Z	36.7187	-97.9311	20km WSW of Medford, Oklahoma	5.629	4.4	mwr
2015-10-10T03:08:10.000Z	36.3573	-97.3745	10km NW of Perry, Oklahoma	7.955	3.1	ml
2015-10-10T01:25:49.380Z	37.2142	-97.9802	8km NNE of Anthony, Kansas	4.45	3.3	ml
2015-10-10T01:23:32.480Z	37.2123	-97.9803	7km NE of Anthony, Kansas	4.16	3	ml
2015-10-10T00:20:20.000Z	36.8414	-97.8147	8km WNW of Medford, Oklahoma	5.819	3.4	ml
2015-10-09T21:57:50.700Z	36.4906	-98.7225	32km NW of Fairview, Oklahoma	2.342	3.4	ml
2015-10-09T09:13:52.900Z	35.9355	-96.7741	5km S of Cushing, Oklahoma	3.565	3.1	ml
2015-10-08T02:45:30.100Z	35.9923	-96.791	2km WNW of Cushing, Oklahoma	5	3	ml
2015-10-07T22:38:59.400Z	36.3656	-97.4514	16km WNW of Perry, Oklahoma	7.571	3	ml
2015-10-07T11:48:35.700Z	36.1182	-97.3038	19km S of Perry, Oklahoma	5.982	3	ml
2015-10-06T20:39:00.700Z	36.9365	-98.0359	24km S of Anthony, Kansas	4.974	3	ml
2015-10-06T12:05:06.500Z	36.2667	-97.3407	5km WSW of Perry, Oklahoma	4.499	3.4	ml
2015-10-05T06:53:01.800Z	36.7769	-98.1898	15km E of Cherokee, Oklahoma	6.033	3.8	ml
2015-10-05T06:52:50.400Z	36.7669	-98.1799	15km E of Cherokee, Oklahoma	6.282	3.4	ml
2015-10-04T19:53:56.800Z	36.6364	-98.1943	12km NE of Helena, Oklahoma	6.095	3	ml
2015-10-03T05:11:58.340Z	37.1015	-97.7032	11km NW of Caldwell, Kansas	5.67	3.4	ml
2015-10-02T12:57:19.100Z	35.7996	-96.6805	6km NNW of Stroud, Oklahoma	4.475	3.2	ml
2015-10-02T06:25:39.700Z	36.3409	-97.0494	22km ENE of Perry, Oklahoma	2.956	3.1	ml
2015-10-02T05:58:52.800Z	36.6274	-98.2138	10km NNE of Helena, Oklahoma	6.41	3.5	mwr
2015-10-01T07:47:33.000Z	36.2541	-97.2343	6km SE of Perry, Oklahoma	7.993	3.2	ml
2015-10-01T05:56:35.500Z	36.252	-97.2268	6km SE of Perry, Oklahoma	5.983	3.7	mwr
2015-09-30T08:28:17.300Z	36.7149	-98.4457	9km WSW of Cherokee, Oklahoma	4.911	3.3	ml
2015-09-29T23:17:28.800Z	36.6273	-98.2122	10km NNE of Helena, Oklahoma	6.147	3.3	ml
2015-09-29T12:40:00.700Z	36.6276	-98.2139	10km NNE of Helena, Oklahoma	6.186	3.1	ml
2015-09-28T12:58:31.700Z	36.8411	-98.2448	13km NE of Cherokee, Oklahoma	4.467	3	ml
2015-09-27T21:59:43.650Z	35.9894	-96.8061	3km W of Cushing, Oklahoma	2.67	3.2	mb_lg
2015-09-27T21:59:43.310Z	35.9856	-96.797	2km W of Cushing, Oklahoma	5.1	3.6	ml

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(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2015-09-27T13:42:47.200Z	36.9031	-97.9099	18km NW of Medford, Oklahoma	3.903	3	ml
2015-09-25T22:30:31.200Z	36.2657	-98.5337	4km W of Fairview, Oklahoma	7.105	3.2	ml
2015-09-25T06:02:58.000Z	36.5267	-98.4576	16km W of Helena, Oklahoma	0.799	3.4	ml
2015-09-25T01:59:03.600Z	35.9932	-96.7899	2km WNW of Cushing, Oklahoma	0.488	3.1	mwr
2015-09-25T01:16:37.700Z	35.987	-96.7872	1km W of Cushing, Oklahoma	2.893	4	mwr
2015-09-24T08:29:25.600Z	36.7396	-98.3618	1km SSW of Cherokee, Oklahoma	7.733	3.2	ml
2015-09-23T04:05:24.700Z	35.5944	-97.4025	8km NNW of Spencer, Oklahoma	5.571	3.1	ml
2015-09-22T12:29:21.800Z	36.2878	-97.5076	19km W of Perry, Oklahoma	4.629	3	ml
2015-09-22T09:22:11.430Z	36.8302	-98.2355	13km NE of Cherokee, Oklahoma	5	3.3	mb_lg
2015-09-22T06:33:53.000Z	36.2911	-98.1903	22km NNE of Okeene, Oklahoma	4.924	3.3	mwr
2015-09-21T19:50:27.600Z	36.2662	-98.5315	4km W of Fairview, Oklahoma	6.167	3.8	ml
2015-09-21T02:48:31.700Z	36.269	-98.5169	3km W of Fairview, Oklahoma	0.78	3.1	ml
2015-09-20T21:39:56.100Z	35.901	-97.2545	4km S of Langston, Oklahoma	5	3.1	ml
2015-09-20T13:06:22.500Z	35.9836	-96.8064	3km W of Cushing, Oklahoma	4.789	3.2	ml
2015-09-20T11:17:52.620Z	37.0495	-97.915	15km SE of Anthony, Kansas	5.85	3	ml
2015-09-19T05:20:03.000Z	35.9878	-96.7963	2km W of Cushing, Oklahoma	4.478	3.1	ml
2015-09-19T05:16:26.600Z	35.9861	-96.7964	2km W of Cushing, Oklahoma	4.573	3	ml
2015-09-19T04:20:12.700Z	36.3331	-96.791	1km ESE of Pawnee, Oklahoma	5	3.1	ml
2015-09-18T23:51:56.310Z	36.8125	-97.8086	6km W of Medford, Oklahoma	3.11	3.1	mb_lg
2015-09-18T13:10:02.780Z	36.2769	-97.5182	20km W of Perry, Oklahoma	5	3.2	mb_lg
2015-09-18T12:35:16.600Z	35.9931	-96.7997	3km WNW of Cushing, Oklahoma	0.208	4.1	mwr
2015-09-18T09:33:00.300Z	35.9834	-96.7962	2km W of Cushing, Oklahoma	4.327	3	ml
2015-09-18T09:16:55.900Z	35.9909	-96.7943	2km WNW of Cushing, Oklahoma	5	3.2	mwr
2015-09-18T02:12:00.440Z	37.473	-98.9575	27km SW of Pratt, Kansas	5.39	3.4	mwr
2015-09-17T15:03:29.500Z	36.8433	-97.8111	7km WNW of Medford, Oklahoma	4.889	3.1	ml
2015-09-16T19:34:02.100Z	36.2801	-97.5128	20km W of Perry, Oklahoma	9.424	3	ml
2015-09-16T15:17:36.300Z	36.3334	-96.7918	1km ESE of Pawnee, Oklahoma	5	3.3	ml
2015-09-16T12:09:52.500Z	36.3288	-96.7891	1km SE of Pawnee, Oklahoma	3.093	3.2	mwr
2015-09-16T04:48:01.000Z	36.4802	-98.9418	24km E of Mooreland, Oklahoma	10.742	3.7	mwr
2015-09-16T02:30:01.900Z	35.9778	-96.7949	2km WSW of Cushing, Oklahoma	4.019	3.7	mwr
2015-09-15T23:45:32.690Z	36.482	-98.921	25km E of Mooreland, Oklahoma	5	3.6	ml
2015-09-15T22:57:13.200Z	36.4821	-98.9374	24km ENE of Mooreland, Oklahoma	6.273	3.4	ml
2015-09-15T16:28:43.200Z	35.671	-97.415	6km ENE of Edmond, Oklahoma	3.076	3.1	ml
2015-09-15T13:58:40.800Z	35.5128	-97.3032	3km WNW of Choctaw, Oklahoma	6.372	3	ml
2015-09-15T02:12:31.200Z	36.0732	-97.4407	19km NE of Crescent, Oklahoma	2.087	3	ml
2015-09-14T17:25:29.100Z	35.7437	-97.3552	15km NE of Edmond, Oklahoma	5.391	3.3	ml
2015-09-14T07:04:30.200Z	36.2785	-97.5116	20km W of Perry, Oklahoma	6.851	3.1	ml
2015-09-14T02:06:24.500Z	36.0713	-97.4386	19km NE of Crescent, Oklahoma	5.197	3.1	ml
2015-09-14T00:04:52.700Z	36.0694	-97.439	19km NE of Crescent, Oklahoma	5.387	3.2	ml
2015-09-12T13:47:08.800Z	35.7444	-97.3549	15km NE of Edmond, Oklahoma	6.457	3.1	ml
2015-09-12T10:55:44.300Z	35.9853	-97.5616	4km NE of Crescent, Oklahoma	6.369	3.2	ml
2015-09-12T00:55:33.250Z	37.059	-97.9318	13km SE of Anthony, Kansas	6.25	3.3	ml
2015-09-10T19:26:57.300Z	36.9027	-97.6825	11km NNE of Medford, Oklahoma	6.56	3.4	mwr
2015-09-10T18:41:33.800Z	36.0301	-97.1221	10km NW of Perkins, Oklahoma	5.336	3.1	ml
2015-09-10T01:05:28.000Z	36.1808	-97.4857	21km SW of Perry, Oklahoma	5.638	3.3	ml
2015-09-09T03:42:48.800Z	36.1824	-97.4975	22km WSW of Perry, Oklahoma	3.473	3.5	mwr
2015-09-08T21:26:20.400Z	36.178	-97.4857	21km SW of Perry, Oklahoma	5.819	3.3	ml
2015-09-08T03:34:22.500Z	36.5293	-98.4921	19km W of Helena, Oklahoma	4.592	3	ml
2015-09-02T23:52:24.000Z	36.9389	-98.0182	23km S of Anthony, Kansas	5.589	3.4	ml
2015-09-02T14:01:26.240Z	35.949	-96.781	4km SSW of Cushing, Oklahoma	3.7	3.3	mwr
2015-09-02T13:50:02.530Z	36.488	-98.511	22km WSW of Helena, Oklahoma	4.4	3.5	mwr
2015-09-01T18:00:46.400Z	35.9507	-96.7805	4km SSW of Cushing, Oklahoma	4.102	3	ml
2015-09-01T11:41:00.080Z	37.0607	-97.5232	8km ENE of Caldwell, Kansas	5.98	3.1	ml
2015-09-01T09:43:50.000Z	35.9486	-96.7844	4km SSW of Cushing, Oklahoma	3.892	3.4	ml
2015-08-31T14:44:09.200Z	36.7851	-98.4536	9km WNW of Cherokee, Oklahoma	0.123	3.5	ml
2015-08-31T01:04:03.200Z	35.7457	-97.359	14km NE of Edmond, Oklahoma	5	3	ml
2015-08-30T12:19:23.900Z	35.675	-97.399	7km ENE of Edmond, Oklahoma	6.01	3.4	mwr
2015-08-30T08:27:26.300Z	36.8066	-98.3452	5km N of Cherokee, Oklahoma	4.67	3.5	ml
2015-08-30T06:16:10.300Z	36.5111	-99.0493	16km ENE of Mooreland, Oklahoma	0.876	3.1	ml
2015-08-30T01:08:33.100Z	36.6379	-97.6453	20km SSE of Medford, Oklahoma	5.383	3	ml
2015-08-29T14:39:05.960Z	37.06	-97.5243	7km ENE of Caldwell, Kansas	5.91	3.1	ml
2015-08-29T00:36:19.100Z	36.0307	-97.1211	10km SSW of Stillwater, Oklahoma	5.016	3.1	ml
2015-08-28T22:05:54.700Z	36.076	-97.5812	13km N of Crescent, Oklahoma	5.228	3.3	ml

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Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2015-08-27T00:56:22.900Z	36.8497	-97.6976	5km NE of Medford, Oklahoma	4.476	3	ml
2015-08-26T07:41:06.000Z	36.9367	-97.6841	12km SSW of Caldwell, Kansas	5	3	ml
2015-08-26T07:33:07.000Z	36.8844	-98.1341	24km NE of Cherokee, Oklahoma	0	3.4	ml
2015-08-26T05:05:27.800Z	36.2767	-97.2667	2km SE of Perry, Oklahoma	4.469	3.2	ml
2015-08-25T22:04:53.230Z	36.2788	-97.2812	1km SSE of Perry, Oklahoma	3.84	3	mb lg
2015-08-25T12:59:25.300Z	36.0338	-97.1195	10km SSW of Stillwater, Oklahoma	3.263	3.3	mwr
2015-08-25T12:18:37.000Z	36.8561	-97.3994	11km WNW of Blackwell, Oklahoma	5.381	3	ml
2015-08-25T03:34:49.300Z	36.0024	-97.1037	7km WNW of Perkins, Oklahoma	2.442	3.1	ml
2015-08-24T16:09:41.590Z	35.829	-97.406	5km SSE of Guthrie, Oklahoma	5.8	3	ml
2015-08-23T16:21:35.300Z	36.0299	-97.1194	9km NW of Perkins, Oklahoma	5.773	3.3	mwr
2015-08-23T15:00:57.000Z	36.5972	-97.698	23km S of Medford, Oklahoma	6.835	3.3	ml
2015-08-23T13:53:07.660Z	36.282	-97.511	20km W of Perry, Oklahoma	3.55	3.1	mb lg
2015-08-23T04:30:12.400Z	36.7647	-98.5403	12km ESE of Alva, Oklahoma	2.12	3.4	ml
2015-08-22T08:46:49.500Z	36.8416	-97.8271	9km WNW of Medford, Oklahoma	5.256	3.8	mwr
2015-08-20T13:17:54.960Z	37.0535	-97.9138	15km SE of Anthony, Kansas	6.26	3.4	ml
2015-08-20T08:28:11.440Z	36.2877	-97.5317	21km W of Perry, Oklahoma	1.11	3.3	mwr
2015-08-20T00:49:17.700Z	36.8484	-98.2548	13km NE of Cherokee, Oklahoma	3.933	3.5	ml
2015-08-20T00:47:12.700Z	36.8441	-98.2687	12km NE of Cherokee, Oklahoma	4.001	3.6	mwr
2015-08-19T23:13:47.300Z	36.5508	-98.4616	17km W of Helena, Oklahoma	5.227	3.3	ml
2015-08-18T04:40:29.930Z	36.2915	-97.533	22km W of Perry, Oklahoma	6.84	3.3	ml
2015-08-17T11:53:56.400Z	35.336	-96.67	12km N of Seminole, Oklahoma	5.4	3.3	ml
2015-08-17T10:57:32.100Z	36.8963	-97.686	10km NNE of Medford, Oklahoma	1.516	3.3	ml
2015-08-16T11:06:36.700Z	36.9308	-97.6796	12km SSW of Caldwell, Kansas	2.167	3.1	ml
2015-08-16T08:49:50.700Z	36.8398	-97.8231	8km WNW of Medford, Oklahoma	4.25	3.4	ml
2015-08-16T00:00:58.300Z	36.8433	-97.8222	8km WNW of Medford, Oklahoma	3.382	3	ml
2015-08-15T12:36:25.700Z	35.984	-97.5508	5km NE of Crescent, Oklahoma	5.372	3	ml
2015-08-15T03:34:22.000Z	36.4813	-98.9184	26km E of Mooreland, Oklahoma	6.467	3.2	ml
2015-08-14T21:25:40.600Z	36.8311	-97.8011	6km WNW of Medford, Oklahoma	0.091	4.1	mwr
2015-08-13T20:02:10.810Z	36.0809	-97.22	15km WSW of Stillwater, Oklahoma	5	3.3	mwr
2015-08-13T17:15:03.900Z	36.8478	-97.8797	13km WNW of Medford, Oklahoma	5	3.3	ml
2015-08-13T14:48:09.700Z	35.7455	-97.39	13km NE of Edmond, Oklahoma	6.15	3.1	ml
2015-08-13T13:59:41.800Z	35.7451	-97.3894	13km NE of Edmond, Oklahoma	5	3.4	ml
2015-08-13T04:15:25.990Z	36.2783	-97.5198	20km W of Perry, Oklahoma	5.4	3.1	mwr
2015-08-13T00:36:59.200Z	36.8171	-97.6173	10km E of Medford, Oklahoma	4.842	3	ml
2015-08-11T04:49:06.500Z	36.6214	-97.8112	21km SSW of Medford, Oklahoma	5	3	ml
2015-08-10T20:47:35.560Z	36.9726	-97.9597	21km SSE of Anthony, Kansas	5	3.1	mb lg
2015-08-10T17:39:38.300Z	36.6773	-98.1522	17km NE of Helena, Oklahoma	5.705	3.5	ml
2015-08-10T01:44:13.600Z	36.9297	-97.6816	13km SSW of Caldwell, Kansas	0.113	3	ml
2015-08-09T16:26:34.300Z	36.7893	-98.2648	9km ENE of Cherokee, Oklahoma	4.936	3.1	ml
2015-08-09T07:05:33.200Z	36.8348	-97.7968	6km WNW of Medford, Oklahoma	0.672	3.5	ml
2015-08-09T02:56:18.500Z	35.439	-97.109	1km WNW of McLoud, Oklahoma	6.9	3.6	ml
2015-08-08T13:57:32.950Z	37.0518	-97.9182	15km SE of Anthony, Kansas	6.98	3.2	ml
2015-08-08T01:48:09.400Z	36.1999	-96.7535	10km NNW of Yale, Oklahoma	4.327	3.3	ml
2015-08-07T21:43:03.000Z	35.937	-97.0753	5km SW of Perkins, Oklahoma	4.663	3	ml
2015-08-07T14:51:58.800Z	36.6936	-98.664	12km S of Alva, Oklahoma	2.407	3.1	ml
2015-08-07T03:04:12.800Z	35.4348	-96.5201	7km SSW of Boley, Oklahoma	3.501	3	ml
2015-08-06T03:51:14.500Z	36.5353	-97.8395	15km NNE of Enid, Oklahoma	4.69	3.1	ml
2015-08-05T23:09:33.700Z	36.63	-97.812	20km SSW of Medford, Oklahoma	3.062	3.3	ml
2015-08-05T15:55:11.300Z	36.6587	-97.7235	16km S of Medford, Oklahoma	8.782	3	ml
2015-08-05T14:23:48.920Z	36.2812	-97.5334	22km W of Perry, Oklahoma	5	3.2	mwr
2015-08-05T13:07:12.700Z	35.9209	-97.3349	7km WSW of Langston, Oklahoma	5.448	3.2	ml
2015-08-05T12:01:12.600Z	36.8315	-97.8011	6km WNW of Medford, Oklahoma	2.567	3.5	ml
2015-08-05T07:48:02.300Z	36.5979	-97.6921	23km S of Medford, Oklahoma	6.021	4	ml
2015-08-05T07:30:01.000Z	36.5972	-97.6914	23km S of Medford, Oklahoma	6.704	3.4	ml
2015-08-05T03:42:30.880Z	36.2883	-97.5218	20km W of Perry, Oklahoma	7.63	3.2	ml
2015-08-04T22:54:23.100Z	35.7955	-97.3163	13km SE of Guthrie, Oklahoma	0.106	3	ml
2015-08-04T18:16:29.600Z	36.838	-97.804	7km WNW of Medford, Oklahoma	3.692	3.4	ml
2015-08-04T08:58:09.900Z	36.836	-98.2917	10km NNE of Cherokee, Oklahoma	4.303	3.2	ml
2015-08-03T22:08:40.900Z	36.689	-98.6069	13km SSE of Alva, Oklahoma	4.033	3.1	ml
2015-08-02T14:43:51.300Z	36.765	-98.542	11km ESE of Alva, Oklahoma	6.3	3	ml
2015-08-01T20:28:48.500Z	36.6836	-97.8592	17km SW of Medford, Oklahoma	6.607	3.3	mwr
2015-07-31T13:26:55.700Z	36.0594	-97.2497	12km N of Langston, Oklahoma	2.195	3.3	ml
2015-07-31T01:39:21.400Z	35.9798	-97.5559	4km NE of Crescent, Oklahoma	0.133	3.3	ml

Table 2-3 - Revision 0
Historical Earthquakes in Oklahoma
Greater than 3.0 Magnitude
(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2015-07-28T12:30:36.800Z	35.9851	-97.5565	4km NE of Crescent, Oklahoma	4.536	3.3	ml
2015-07-28T08:11:57.500Z	36.2874	-97.5162	20km W of Perry, Oklahoma	7.414	3.5	ml
2015-07-28T01:18:27.200Z	35.9909	-97.5813	4km NNE of Crescent, Oklahoma	5.253	4.1	mwr
2015-07-28T00:24:03.400Z	35.9886	-97.5789	4km NNE of Crescent, Oklahoma	4.658	3.5	ml
2015-07-27T19:27:56.900Z	35.9885	-97.577	4km NNE of Crescent, Oklahoma	5	3	ml
2015-07-27T18:12:15.400Z	35.9889	-97.5717	4km NNE of Crescent, Oklahoma	5	4.5	mwr
2015-07-27T17:49:27.900Z	35.9908	-97.56	5km NE of Crescent, Oklahoma	4.01	3.8	mwr
2015-07-27T17:06:30.500Z	35.9875	-97.5606	4km NE of Crescent, Oklahoma	5.647	3.4	ml
2015-07-27T12:31:46.600Z	35.9886	-97.5602	5km NE of Crescent, Oklahoma	5.68	3	ml
2015-07-27T09:25:04.800Z	36.8348	-97.8067	7km WNW of Medford, Oklahoma	5	3.2	ml
2015-07-26T13:26:50.480Z	35.9983	-97.5691	5km NNE of Crescent, Oklahoma	4.19	3.2	mb lg
2015-07-26T11:30:47.300Z	36.519	-99.009	19km ENE of Mooreland, Oklahoma	5	3.2	ml
2015-07-26T09:54:33.600Z	35.989	-97.5694	4km NNE of Crescent, Oklahoma	5.468	3.6	mwr
2015-07-26T09:15:05.500Z	35.95	-96.78	4km SSW of Cushing, Oklahoma	5.1	3	ml
2015-07-26T06:59:44.600Z	35.9877	-97.5661	4km NNE of Crescent, Oklahoma	5.964	3.2	ml
2015-07-25T11:14:44.100Z	35.9902	-97.5661	4km NNE of Crescent, Oklahoma	4.269	3.7	mwr
2015-07-25T08:47:53.100Z	36.3397	-96.8201	1km W of Pawnee, Oklahoma	1.296	3	ml
2015-07-25T04:49:02.700Z	36.159	-96.948	11km ENE of Stillwater, Oklahoma	4.2	3	ml
2015-07-25T04:10:33.700Z	36.6047	-97.6149	24km SSE of Medford, Oklahoma	5.161	3.2	ml
2015-07-24T16:21:23.000Z	36.8416	-98.2303	14km NE of Cherokee, Oklahoma	5.208	3.1	ml
2015-07-24T16:01:01.700Z	36.296	-97.5234	21km W of Perry, Oklahoma	8.233	3.1	ml
2015-07-24T12:31:13.900Z	36.615	-98.4056	14km WNW of Helena, Oklahoma	3.497	3.5	mwr
2015-07-23T17:33:19.900Z	35.4476	-97.1152	2km WNW of McLoud, Oklahoma	6.039	3	ml
2015-07-23T13:28:57.500Z	36.3404	-96.8037	0km N of Pawnee, Oklahoma	5	3.3	ml
2015-07-23T12:20:55.500Z	36.3439	-96.7945	1km NE of Pawnee, Oklahoma	4.323	3.3	ml
2015-07-22T10:48:27.300Z	36.6004	-97.6848	23km S of Medford, Oklahoma	6.216	3.2	ml
2015-07-22T01:19:30.800Z	36.8464	-98.2284	15km NE of Cherokee, Oklahoma	0.149	3.2	ml
2015-07-21T18:24:08.200Z	36.8367	-98.2445	13km NE of Cherokee, Oklahoma	5.338	3.5	ml
2015-07-21T13:10:54.020Z	36.284	-97.638	23km E of Waukomis, Oklahoma	4	3	ml
2015-07-21T11:16:13.800Z	36.837	-98.245	13km NE of Cherokee, Oklahoma	5	3.1	mwr
2015-07-21T09:08:41.600Z	36.834	-98.25	12km NE of Cherokee, Oklahoma	4.946	3.5	ml
2015-07-21T08:46:54.100Z	36.2821	-97.6428	22km E of Waukomis, Oklahoma	2.959	3.2	mwr
2015-07-21T07:38:28.900Z	36.2807	-97.4588	15km W of Perry, Oklahoma	1.106	3	ml
2015-07-21T05:02:04.400Z	36.6	-97.6892	23km S of Medford, Oklahoma	5.696	3.3	ml
2015-07-21T02:10:21.400Z	36.8477	-98.2588	13km NE of Cherokee, Oklahoma	3.909	3.4	ml
2015-07-20T20:54:32.100Z	36.8458	-98.2516	13km NE of Cherokee, Oklahoma	5	3.7	mwr
2015-07-20T20:50:16.000Z	36.3875	-96.8597	7km NW of Pawnee, Oklahoma	5	3.4	ml
2015-07-20T20:19:03.400Z	36.842	-98.2593	13km NE of Cherokee, Oklahoma	4.079	4.4	mwr
2015-07-20T03:33:24.000Z	36.8713	-97.895	16km WNW of Medford, Oklahoma	3.961	3.1	ml
2015-07-17T12:30:37.800Z	36.5245	-98.4652	17km W of Helena, Oklahoma	4.632	3.6	mwr
2015-07-15T08:57:15.900Z	35.9874	-97.5652	4km NE of Crescent, Oklahoma	4.136	3.4	mwr
2015-07-14T10:58:51.900Z	35.8174	-97.4461	7km SSW of Guthrie, Oklahoma	4.783	3.2	ml
2015-07-14T08:22:15.000Z	34.9775	-97.6798	17km S of Blanchard, Oklahoma	4.776	3.2	mwr
2015-07-14T01:33:58.700Z	35.7419	-97.5763	13km NW of Edmond, Oklahoma	6.169	3.4	ml
2015-07-12T22:37:21.700Z	36.8682	-98.0086	25km WNW of Medford, Oklahoma	5.425	3.1	ml
2015-07-11T21:52:09.100Z	36.5264	-98.4653	17km W of Helena, Oklahoma	5	3.1	ml
2015-07-11T09:23:35.300Z	36.0247	-97.1049	8km NW of Perkins, Oklahoma	3.855	3.7	mwr
2015-07-11T01:21:19.700Z	36.294	-97.523	21km W of Perry, Oklahoma	7.2	3.1	ml
2015-07-11T00:56:53.000Z	36.2891	-97.5168	20km W of Perry, Oklahoma	7.44	3.6	ml
2015-07-10T23:09:16.700Z	36.662	-98.2852	12km SSE of Cherokee, Oklahoma	5.426	3.7	mwr
2015-07-10T09:58:56.700Z	36.5222	-98.4682	17km W of Helena, Oklahoma	4.243	3.5	ml
2015-07-09T06:45:19.600Z	35.6663	-97.0947	9km E of Luther, Oklahoma	5	3	ml
2015-07-08T16:33:28.700Z	35.7412	-97.3835	13km NE of Edmond, Oklahoma	6.21	3.4	ml
2015-07-08T01:13:20.500Z	36.8427	-97.8828	13km WNW of Medford, Oklahoma	5.499	3	ml
2015-07-07T10:53:12.300Z	35.7443	-97.3747	13km NE of Edmond, Oklahoma	5	3.1	ml
2015-07-06T06:20:39.700Z	35.7446	-97.3762	13km NE of Edmond, Oklahoma	5.581	3.3	ml
2015-07-04T21:00:27.700Z	36.52	-98.4749	18km W of Helena, Oklahoma	3.151	3.6	ml
2015-07-04T12:33:51.500Z	36.7615	-97.5569	16km ESE of Medford, Oklahoma	5	3.1	ml
2015-07-04T11:57:56.600Z	36.281	-97.516	20km W of Perry, Oklahoma	5.7	3.3	mwr
2015-07-04T01:05:22.700Z	36.293	-96.861	7km SW of Pawnee, Oklahoma	3.8	3.4	mwr
2015-07-03T10:43:54.500Z	36.757	-97.565	16km ESE of Medford, Oklahoma	6.445	3	ml
2015-07-03T05:19:31.600Z	36.2812	-97.5192	20km W of Perry, Oklahoma	5	3.5	mwr
2015-07-02T22:40:35.000Z	36.8242	-97.7204	2km NNE of Medford, Oklahoma	4.914	3.1	ml

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(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2015-07-02T20:28:37.200Z	36.4207	-97.3336	15km NNW of Perry, Oklahoma	5	3.2	ml
2015-07-01T21:59:53.800Z	36.0707	-97.437	19km NE of Crescent, Oklahoma	5.508	3.3	ml
2015-07-01T17:15:47.900Z	36.0912	-97.1003	4km SW of Stillwater, Oklahoma	3.848	3.5	mwr
2015-06-30T21:42:00.300Z	35.9159	-97.3133	6km WSW of Langston, Oklahoma	5.079	3.2	ml
2015-06-30T11:20:07.600Z	35.594	-97.373	7km N of Spencer, Oklahoma	4.3	3.3	ml
2015-06-29T04:12:37.400Z	36.9196	-97.8632	17km NW of Medford, Oklahoma	0.165	3.5	ml
2015-06-29T02:46:07.900Z	36.9507	-97.6913	11km SW of Caldwell, Kansas	5	3.1	ml
2015-06-28T22:38:25.400Z	36.3203	-96.8228	2km SW of Pawnee, Oklahoma	3.41	3.1	ml
2015-06-28T15:36:50.700Z	36.0789	-97.5853	14km N of Crescent, Oklahoma	5.642	3.1	ml
2015-06-28T14:37:15.400Z	36.2889	-97.5203	20km W of Perry, Oklahoma	6.481	3.3	ml
2015-06-28T01:35:19.700Z	36.6779	-98.1617	17km NNE of Helena, Oklahoma	5	3.4	mwr
2015-06-27T22:49:06.800Z	36.5909	-97.5649	24km WSW of Tonkawa, Oklahoma	5.961	3.1	ml
2015-06-27T20:09:16.400Z	36.9449	-97.6328	9km SSW of Caldwell, Kansas	5.357	3	ml
2015-06-27T13:03:03.200Z	36.5373	-97.7295	20km NE of Enid, Oklahoma	4.994	3	ml
2015-06-27T03:31:28.200Z	36.7458	-98.2238	11km E of Cherokee, Oklahoma	4.61	3.5	mwr
2015-06-27T02:38:11.700Z	35.8769	-97.0439	10km S of Perkins, Oklahoma	5	3	ml
2015-06-27T00:56:43.000Z	36.8519	-97.6976	5km NNE of Medford, Oklahoma	6.76	3.2	ml
2015-06-26T10:49:58.800Z	35.74	-97.379	13km NE of Edmond, Oklahoma	4.8	3.4	ml
2015-06-26T10:18:35.700Z	36.101	-97.344	19km NNW of Langston, Oklahoma	5	3.1	ml
2015-06-26T06:19:23.200Z	35.7436	-97.3771	13km NE of Edmond, Oklahoma	5.752	3.4	ml
2015-06-26T05:54:03.800Z	35.7417	-97.3796	13km NE of Edmond, Oklahoma	5	3.7	mwr
2015-06-26T04:35:56.300Z	35.739	-97.388	12km NE of Edmond, Oklahoma	4.9	3.5	mwr
2015-06-25T12:54:25.000Z	35.8185	-97.4388	6km S of Guthrie, Oklahoma	4.04	3	ml
2015-06-25T06:03:06.800Z	36.7312	-98.3156	4km SE of Cherokee, Oklahoma	5.73	3.1	ml
2015-06-23T17:37:55.400Z	36.688	-98.6114	13km SSE of Alva, Oklahoma	4.526	3.4	ml
2015-06-22T22:16:20.800Z	35.743	-97.3876	12km NE of Edmond, Oklahoma	5.534	3.9	mwr
2015-06-22T21:09:27.900Z	35.7499	-97.4005	12km NNE of Edmond, Oklahoma	5	3.5	ml
2015-06-22T21:06:30.100Z	35.7477	-97.3989	12km NE of Edmond, Oklahoma	5.854	3.6	mwr
2015-06-22T19:47:26.900Z	35.8169	-97.4468	7km SSW of Guthrie, Oklahoma	5.454	3.4	ml
2015-06-22T04:54:12.600Z	36.2134	-97.5616	25km WSW of Perry, Oklahoma	5.625	3.4	mwr
2015-06-22T04:05:43.100Z	35.7429	-97.394	12km NE of Edmond, Oklahoma	5.278	3	ml
2015-06-22T04:00:34.600Z	35.7437	-97.3836	13km NE of Edmond, Oklahoma	6.181	3.2	mwr
2015-06-21T18:58:12.000Z	36.2855	-97.52	20km W of Perry, Oklahoma	6.33	3.3	ml
2015-06-21T17:51:38.000Z	36.2917	-96.8601	7km SW of Pawnee, Oklahoma	5	3.4	ml
2015-06-21T12:25:00.000Z	36.5534	-97.1898	17km SE of Tonkawa, Oklahoma	6.12	3.1	ml
2015-06-21T00:58:56.000Z	35.7475	-97.4006	12km NNE of Edmond, Oklahoma	5.882	3.4	ml
2015-06-20T21:07:02.400Z	35.7428	-97.3843	13km NE of Edmond, Oklahoma	6.149	3.1	ml
2015-06-20T15:50:37.400Z	36.2938	-97.5363	22km W of Perry, Oklahoma	6.006	3	ml
2015-06-20T11:59:21.400Z	36.2884	-96.8624	7km SW of Pawnee, Oklahoma	5	3.3	ml
2015-06-20T11:21:16.000Z	35.739	-97.3839	12km NE of Edmond, Oklahoma	5.35	3.4	mwr
2015-06-20T10:56:03.200Z	35.7469	-97.3998	12km NE of Edmond, Oklahoma	5.589	3.3	mwr
2015-06-20T06:46:05.600Z	35.7417	-97.3866	12km NE of Edmond, Oklahoma	5	3	ml
2015-06-20T06:26:01.200Z	35.9022	-97.2608	4km S of Langston, Oklahoma	4.929	3.1	ml
2015-06-20T05:23:01.500Z	35.746	-97.3989	12km NE of Edmond, Oklahoma	5.376	3.4	ml
2015-06-20T05:10:54.900Z	35.7392	-97.3865	12km NE of Edmond, Oklahoma	3	4	mwr
2015-06-20T04:36:05.600Z	35.7446	-97.3924	12km NE of Edmond, Oklahoma	5.667	3.5	ml
2015-06-20T04:29:03.600Z	35.7447	-97.3919	12km NE of Edmond, Oklahoma	5.649	3.6	ml
2015-06-19T21:56:04.800Z	36.8521	-98.276	13km NNE of Cherokee, Oklahoma	5.774	3.2	ml
2015-06-19T16:23:48.000Z	36.1248	-97.2797	18km S of Perry, Oklahoma	3.542	3	ml
2015-06-19T13:16:07.700Z	36.2957	-97.5337	22km W of Perry, Oklahoma	6.339	3.1	ml
2015-06-19T03:07:26.400Z	36.2954	-97.5346	22km W of Perry, Oklahoma	5.16	3	ml
2015-06-18T23:10:17.000Z	35.7735	-97.4843	12km SSW of Guthrie, Oklahoma	6.87	3.5	ml
2015-06-18T23:02:58.000Z	35.7719	-97.4822	12km SSW of Guthrie, Oklahoma	7.019	3	ml
2015-06-18T22:29:14.000Z	36.3035	-96.6757	12km ESE of Pawnee, Oklahoma	5.015	3	ml
2015-06-17T19:21:12.200Z	36.2904	-97.5408	22km W of Perry, Oklahoma	6.433	3.1	ml
2015-06-17T19:17:08.700Z	36.285	-97.523	21km W of Perry, Oklahoma	6.008	4.3	mwr
2015-06-16T15:35:57.600Z	36.5158	-97.2814	18km S of Tonkawa, Oklahoma	4.871	3.1	ml
2015-06-16T03:59:15.520Z	36.511	-98.706	32km S of Alva, Oklahoma	5	3.1	ml
2015-06-16T02:20:36.900Z	36.3028	-96.6614	13km ESE of Pawnee, Oklahoma	4.651	3.2	ml
2015-06-15T19:49:06.560Z	37.0179	-97.9107	18km SE of Anthony, Kansas	5	3.4	mb lg
2015-06-14T19:10:44.000Z	36.2924	-97.5306	21km W of Perry, Oklahoma	6.02	3.3	mwr
2015-06-14T18:17:09.000Z	36.286	-97.5217	20km W of Perry, Oklahoma	6.278	4	mwr
2015-06-14T05:57:24.800Z	36.2884	-97.5251	21km W of Perry, Oklahoma	6.462	3.2	ml

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Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2015-06-13T20:54:42.600Z	36.2676	-97.3864	9km WSW of Perry, Oklahoma	7.12	3.3	mwr
2015-06-13T07:33:34.200Z	36.5033	-97.1454	21km SSW of McCord, Oklahoma	5.776	3	ml
2015-06-13T06:40:12.200Z	36.2972	-96.6676	13km ESE of Pawnee, Oklahoma	5	3.1	ml
2015-06-12T23:20:03.600Z	36.296	-96.6732	12km ESE of Pawnee, Oklahoma	0.978	3.4	ml
2015-06-12T22:42:23.900Z	36.3009	-96.674	12km ESE of Pawnee, Oklahoma	0.355	3.7	mwr
2015-06-12T22:35:38.800Z	35.5581	-97.1252	8km NNE of Harrah, Oklahoma	6.527	3.5	ml
2015-06-12T04:38:26.500Z	36.292	-97.534	22km W of Perry, Oklahoma	6.1	3.6	mwr
2015-06-11T23:31:37.900Z	36.2829	-97.5185	20km W of Perry, Oklahoma	5.651	3.7	mwr
2015-06-11T23:28:59.600Z	36.286	-97.5236	21km W of Perry, Oklahoma	5.555	3.5	mwr
2015-06-11T22:55:55.900Z	36.8722	-98.8326	16km WNW of Alva, Oklahoma	2.518	3	ml
2015-06-11T10:18:18.000Z	36.2932	-97.5259	21km W of Perry, Oklahoma	5.658	3.2	ml
2015-06-11T02:25:13.400Z	36.6241	-97.667	21km SSE of Medford, Oklahoma	5	3	ml
2015-06-10T13:05:08.940Z	36.288	-97.518	20km W of Perry, Oklahoma	8	3.4	mwr
2015-06-09T19:47:56.600Z	36.7434	-98.2235	11km E of Cherokee, Oklahoma	4.753	3.3	ml
2015-06-09T01:26:51.400Z	36.286	-97.5312	21km W of Perry, Oklahoma	6.171	3.7	mwr
2015-06-08T21:36:58.500Z	36.2852	-97.5219	21km W of Perry, Oklahoma	2.959	3.9	mwr
2015-06-08T13:20:16.000Z	36.3916	-98.6607	21km NW of Fairview, Oklahoma	4.027	3.9	ml
2015-06-08T04:28:16.240Z	37.232	-97.9583	8km SE of Harper, Kansas	5.66	3.4	mb lg
2015-06-07T20:20:25.860Z	36.844	-97.7617	4km NNW of Medford, Oklahoma	5	3.3	mb lg
2015-06-07T17:15:21.000Z	35.6767	-97.3974	7km ENE of Edmond, Oklahoma	5	3.5	ml
2015-06-07T12:56:06.900Z	36.944	-97.6353	10km SSW of Caldwell, Kansas	6.509	3.1	ml
2015-06-06T15:55:26.000Z	36.2515	-97.5339	22km W of Perry, Oklahoma	6.668	3	ml
2015-06-05T23:12:47.450Z	37.2648	-97.9213	9km ESE of Harper, Kansas	2.35	4.1	mwr
2015-06-05T23:12:41.270Z	37.2194	-97.9677	9km NE of Anthony, Kansas	5.11	3.6	mb
2015-06-05T22:53:05.140Z	37.2214	-97.9528	9km SE of Harper, Kansas	7.36	3.2	mb lg
2015-06-05T18:31:35.200Z	36.1659	-96.9835	8km NE of Stillwater, Oklahoma	5.237	3.2	ml
2015-06-05T17:57:48.300Z	36.6636	-98.2951	11km SSE of Cherokee, Oklahoma	4.632	3.3	ml
2015-06-05T13:28:17.100Z	36.3187	-97.5191	20km W of Perry, Oklahoma	6.92	3	ml
2015-06-04T18:02:03.400Z	35.7864	-96.9885	13km NW of Chandler, Oklahoma	6.06	3.4	ml
2015-06-04T10:49:03.000Z	36.5145	-97.2556	18km SSE of Tonkawa, Oklahoma	6.23	3.2	ml
2015-06-04T00:17:52.200Z	36.8023	-98.5401	11km E of Alva, Oklahoma	5	3.2	ml
2015-06-03T05:55:39.900Z	35.7885	-96.9896	13km NW of Chandler, Oklahoma	6.854	3	ml
2015-06-03T05:28:28.000Z	35.7866	-96.9874	13km NW of Chandler, Oklahoma	6.113	3.6	ml
2015-06-02T21:34:56.200Z	35.7877	-96.9885	13km NW of Chandler, Oklahoma	5.758	3.7	ml
2015-06-02T07:55:51.200Z	36.952	-97.618	8km S of Caldwell, Kansas	7.6	3.6	mwr
2015-06-02T06:45:22.400Z	36.9443	-97.6187	9km S of Caldwell, Kansas	5	3	ml
2015-06-02T04:58:19.700Z	36.2674	-98.5366	5km W of Fairview, Oklahoma	8.433	3	ml
2015-06-02T04:18:58.100Z	36.2626	-97.3869	9km WSW of Perry, Oklahoma	7.077	3	ml
2015-06-02T00:58:09.260Z	37.0317	-97.9035	17km SE of Anthony, Kansas	5.35	3	mb lg
2015-06-01T21:31:56.500Z	35.7859	-96.9874	13km NW of Chandler, Oklahoma	6.55	3.3	ml
2015-06-01T19:19:43.800Z	35.788	-96.9872	13km NW of Chandler, Oklahoma	6.269	3.5	ml
2015-06-01T17:35:34.000Z	35.7887	-96.9871	13km NW of Chandler, Oklahoma	6.167	3.5	mwr
2015-06-01T15:19:56.100Z	35.9226	-97.3367	7km WSW of Langston, Oklahoma	5.973	3.1	ml
2015-05-31T20:18:22.000Z	36.7083	-98.6523	10km S of Alva, Oklahoma	4.869	3.1	ml
2015-05-30T21:10:24.080Z	37.0506	-97.9219	14km SE of Anthony, Kansas	5.19	3.2	mb lg
2015-05-30T11:21:40.050Z	37.0411	-97.9047	16km SE of Anthony, Kansas	5	3.6	mwr
2015-05-28T12:00:27.000Z	36.1356	-97.2794	17km S of Perry, Oklahoma	5.664	3.5	mwr
2015-05-28T00:38:21.200Z	35.7458	-97.3888	13km NE of Edmond, Oklahoma	5.778	3	ml
2015-05-27T19:13:23.000Z	36.3055	-96.6613	13km ESE of Pawnee, Oklahoma	5.58	3.1	ml
2015-05-26T23:30:39.100Z	35.9247	-97.3447	8km NE of Guthrie, Oklahoma	5.752	3.1	ml
2015-05-26T22:27:45.600Z	36.5212	-99.0078	19km ENE of Mooreland, Oklahoma	7.24	3	ml
2015-05-26T17:30:44.700Z	36.2471	-97.5317	22km WSW of Perry, Oklahoma	6.973	3	ml
2015-05-26T16:00:07.900Z	36.2981	-97.5599	24km W of Perry, Oklahoma	6.915	3	ml
2015-05-26T14:36:26.700Z	36.2963	-97.5555	24km W of Perry, Oklahoma	7.26	3	ml
2015-05-26T13:50:15.300Z	36.2974	-97.5585	24km W of Perry, Oklahoma	7.221	3	ml
2015-05-25T12:38:00.800Z	35.597	-97.065	13km ESE of Luther, Oklahoma	5.9	3.2	ml
2015-05-24T21:49:47.910Z	37.142	-97.6502	12km NNW of Caldwell, Kansas	6.41	3.4	mb lg
2015-05-23T18:44:28.360Z	37.4294	-98.9535	30km SW of Pratt, Kansas	5	4	mwr
2015-05-23T15:11:40.300Z	37.4447	-98.9522	29km SW of Pratt, Kansas	5	3.3	mb lg
2015-05-23T10:46:42.300Z	36.8495	-97.6975	5km NE of Medford, Oklahoma	7.128	3.2	mwr
2015-05-22T10:57:29.700Z	36.6184	-98.4082	14km WNW of Helena, Oklahoma	2.412	3.5	mwr
2015-05-22T07:17:15.100Z	36.5145	-99.0189	18km ENE of Mooreland, Oklahoma	5.876	3	ml
2015-05-21T11:03:15.700Z	35.9936	-97.2263	5km NNE of Langston, Oklahoma	4.498	3.3	ml

Table 2-3 - Revision 0
Historical Earthquakes in Oklahoma
Greater than 3.0 Magnitude
(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2015-05-21T02:29:13.300Z	36.1086	-97.3114	18km NNW of Langston, Oklahoma	5.283	3	ml
2015-05-20T10:44:40.600Z	36.5144	-99.0086	19km ENE of Mooreland, Oklahoma	6.243	3.3	ml
2015-05-19T14:54:41.800Z	36.599	-98.6603	22km S of Alva, Oklahoma	5	3	ml
2015-05-18T21:45:13.100Z	36.9407	-97.6341	10km SSW of Caldwell, Kansas	4.659	3	ml
2015-05-18T16:46:50.000Z	35.8265	-97.2238	13km SSE of Langston, Oklahoma	6.318	3	ml
2015-05-18T07:14:32.400Z	36.607	-98.6922	22km S of Alva, Oklahoma	13.73	3.4	ml
2015-05-18T02:52:50.200Z	35.8082	-97.4452	8km SSW of Guthrie, Oklahoma	5.398	3.5	mwr
2015-05-18T02:01:29.500Z	35.8142	-97.4517	7km SSW of Guthrie, Oklahoma	5.227	3	ml
2015-05-17T20:38:24.500Z	36.9597	-97.5921	8km S of Caldwell, Kansas	4.78	3.1	ml
2015-05-17T18:36:22.200Z	35.826	-97.2249	13km SSE of Langston, Oklahoma	6.466	3.4	ml
2015-05-17T15:20:23.200Z	36.554	-97.182	17km SE of Tonkawa, Oklahoma	8	3.2	ml
2015-05-16T14:25:17.830Z	35.6035	-97.071	13km ESE of Luther, Oklahoma	5	3	mb_lg
2015-05-16T12:03:20.200Z	35.6076	-97.0601	13km ESE of Luther, Oklahoma	3.7	3.3	ml
2015-05-15T05:29:54.800Z	36.3348	-96.8174	1km WSW of Pawnee, Oklahoma	5	3.1	ml
2015-05-14T18:39:16.300Z	35.6682	-97.3154	10km W of Luther, Oklahoma	3.727	3.2	ml
2015-05-14T10:04:32.710Z	37.0308	-97.9074	17km SE of Anthony, Kansas	5	3.3	mb_lg
2015-05-14T04:08:45.900Z	36.9396	-97.8487	17km NW of Medford, Oklahoma	5	3.1	ml
2015-05-12T21:31:02.600Z	36.3508	-97.0811	19km ENE of Perry, Oklahoma	3.888	3.2	ml
2015-05-12T15:59:06.600Z	36.5175	-98.9653	23km ENE of Mooreland, Oklahoma	3.522	3.1	ml
2015-05-10T21:15:23.130Z	36.764	-98.688	4km SSW of Alva, Oklahoma	8.2	3.3	ml
2015-05-10T04:11:25.300Z	36.6239	-97.6898	20km S of Medford, Oklahoma	6.368	3.3	ml
2015-05-10T02:57:13.600Z	36.0765	-97.4515	18km NE of Crescent, Oklahoma	4.137	3	ml
2015-05-10T01:33:25.900Z	36.8195	-97.7165	2km NE of Medford, Oklahoma	6.627	3.1	ml
2015-05-09T18:41:40.600Z	36.9602	-97.5881	8km SSE of Caldwell, Kansas	5.037	3	ml
2015-05-09T03:49:47.100Z	36.935	-97.6407	11km SSW of Caldwell, Kansas	1.888	3.1	ml
2015-05-09T03:01:22.100Z	36.9432	-97.6373	10km SSW of Caldwell, Kansas	5.644	3	ml
2015-05-08T23:19:04.800Z	36.0256	-97.1076	8km NW of Perkins, Oklahoma	5.081	3.2	ml
2015-05-08T23:05:01.000Z	36.5151	-99.015	18km ENE of Mooreland, Oklahoma	7.567	3.1	ml
2015-05-08T16:43:53.300Z	35.8186	-97.2418	14km S of Langston, Oklahoma	2.432	3.2	ml
2015-05-08T14:10:03.100Z	36.6033	-97.8236	23km NNE of Enid, Oklahoma	5.762	3.5	ml
2015-05-08T01:06:03.900Z	36.5129	-99.0494	16km ENE of Mooreland, Oklahoma	14.442	3.2	ml
2015-05-07T21:31:06.200Z	36.5085	-99.0681	14km ENE of Mooreland, Oklahoma	7.986	3.3	ml
2015-05-07T20:01:24.290Z	37.203	-98.0355	5km N of Anthony, Kansas	8.53	3	mb_lg
2015-05-07T12:48:38.000Z	36.2982	-96.8807	8km WSW of Pawnee, Oklahoma	5	3.1	ml
2015-05-07T02:48:50.000Z	35.6071	-97.0542	14km ESE of Luther, Oklahoma	4.28	3	ml
2015-05-07T00:58:41.100Z	36.1202	-97.5764	18km N of Crescent, Oklahoma	3.332	3	ml
2015-05-06T17:11:39.400Z	36.3196	-96.7527	5km ESE of Pawnee, Oklahoma	1.137	3.1	ml
2015-05-06T14:10:07.200Z	36.8752	-98.1615	21km NE of Cherokee, Oklahoma	3.276	3.5	ml
2015-05-06T11:33:21.300Z	35.926	-97.345	8km NE of Guthrie, Oklahoma	4.9	3.1	ml
2015-05-06T11:06:08.300Z	35.9228	-97.342	8km ENE of Guthrie, Oklahoma	3.747	3.4	ml
2015-05-06T10:05:07.380Z	37.2721	-98.0421	2km SW of Harper, Kansas	7.29	3.2	mb_lg
2015-05-06T09:29:12.800Z	36.8714	-98.1544	22km NE of Cherokee, Oklahoma	6.744	3.1	ml
2015-05-06T09:12:17.570Z	37.224	-98.1041	9km SW of Harper, Kansas	3.37	3	mb_lg
2015-05-04T23:59:52.200Z	35.6001	-97.0543	14km ESE of Luther, Oklahoma	4.775	3.2	ml
2015-05-04T20:13:31.600Z	36.1157	-97.2316	15km W of Stillwater, Oklahoma	5.06	3	ml
2015-05-04T11:04:40.400Z	36.3285	-96.946	12km W of Pawnee, Oklahoma	2.523	3	ml
2015-05-04T08:15:01.300Z	36.945	-97.639	10km SSW of Caldwell, Kansas	5.377	3	ml
2015-05-04T02:10:19.000Z	36.513	-98.9824	21km ENE of Mooreland, Oklahoma	5.398	3	ml
2015-05-04T01:30:06.500Z	36.7264	-97.9166	18km WSW of Medford, Oklahoma	4.12	3.5	ml
2015-05-02T17:05:21.100Z	36.1381	-96.8551	14km W of Yale, Oklahoma	5.007	3	ml
2015-05-01T07:32:54.900Z	36.5224	-98.991	21km ENE of Mooreland, Oklahoma	4.2	3.8	mwr
2015-05-01T07:26:29.400Z	35.8126	-97.2417	14km S of Langston, Oklahoma	4.186	3.1	ml
2015-04-29T20:30:58.000Z	36.2845	-97.5163	20km W of Perry, Oklahoma	8.843	3	ml
2015-04-29T16:42:26.600Z	36.2841	-97.5182	20km W of Perry, Oklahoma	5.661	3.8	mwr
2015-04-29T15:06:15.100Z	36.1825	-97.3258	12km SSW of Perry, Oklahoma	4.439	3.1	ml
2015-04-29T05:25:53.200Z	35.7442	-97.3829	13km NE of Edmond, Oklahoma	5.696	3.2	ml
2015-04-28T22:18:54.480Z	37.0208	-97.896	18km SE of Anthony, Kansas	7.74	3.6	mwr
2015-04-28T20:59:47.300Z	36.2827	-97.5113	20km W of Perry, Oklahoma	5.673	3.3	ml
2015-04-28T00:20:25.500Z	36.558	-98.1517	10km E of Helena, Oklahoma	6.617	3	ml
2015-04-27T22:22:17.900Z	35.918	-97.3256	7km WSW of Langston, Oklahoma	5.279	4.1	mwr
2015-04-27T06:23:12.800Z	36.2804	-97.5114	20km W of Perry, Oklahoma	6.789	3.1	ml
2015-04-26T19:07:25.800Z	36.2833	-97.5131	20km W of Perry, Oklahoma	4.953	3.3	mwr
2015-04-26T13:53:39.210Z	35.967	-97.38	10km NNE of Guthrie, Oklahoma	6.1	3.1	ml

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(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2015-04-26T02:43:16.300Z	36.2732	-96.9406	14km WSW of Pawnee, Oklahoma	4.877	3	ml
2015-04-26T02:29:21.600Z	35.971	-97.382	10km NNE of Guthrie, Oklahoma	4.7	3	ml
2015-04-26T01:43:58.800Z	36.2821	-96.91	11km WSW of Pawnee, Oklahoma	5.015	3	ml
2015-04-25T23:13:04.300Z	36.4033	-97.3326	13km NNW of Perry, Oklahoma	7.512	3.4	ml
2015-04-24T22:23:42.700Z	35.7474	-97.3799	13km NE of Edmond, Oklahoma	5.461	3.2	ml
2015-04-24T12:32:57.900Z	35.585	-97.3725	6km N of Spencer, Oklahoma	6.588	3.6	ml
2015-04-24T12:01:09.700Z	36.116	-97.58	18km N of Crescent, Oklahoma	3.134	3	ml
2015-04-24T06:16:46.600Z	36.274	-97.463	15km W of Perry, Oklahoma	5.3	3	ml
2015-04-24T06:15:50.200Z	36.7392	-97.5768	15km ESE of Medford, Oklahoma	3.53	3.2	mb_lg
2015-04-23T06:20:40.500Z	36.624	-97.6568	21km SSE of Medford, Oklahoma	5.85	3.7	mwr
2015-04-23T05:21:31.600Z	36.629	-97.654	20km SSE of Medford, Oklahoma	6.5	3.4	ml
2015-04-23T05:20:01.400Z	36.6236	-97.6575	21km SSE of Medford, Oklahoma	7.098	3	ml
2015-04-22T20:57:04.900Z	36.9428	-97.6334	10km SSW of Caldwell, Kansas	6.4	3.4	ml
2015-04-20T12:08:31.400Z	36.849	-97.88	13km WNW of Medford, Oklahoma	5.3	3.4	mwr
2015-04-19T06:28:14.400Z	35.9188	-97.3241	6km WSW of Langston, Oklahoma	5.631	3.5	mwr
2015-04-19T05:27:14.800Z	35.953	-97.3318	6km W of Langston, Oklahoma	3.16	4.2	mwr
2015-04-18T18:34:04.800Z	36.9446	-97.6311	9km SSW of Caldwell, Kansas	5	3.4	mwr
2015-04-17T16:48:16.300Z	35.9196	-97.3268	7km WSW of Langston, Oklahoma	5.433	3.4	ml
2015-04-17T10:42:24.000Z	35.9148	-97.4096	4km NNE of Guthrie, Oklahoma	5.977	3.1	ml
2015-04-17T09:37:02.600Z	35.919	-97.3258	6km WSW of Langston, Oklahoma	5.134	3.3	ml
2015-04-17T09:08:05.800Z	35.9226	-97.3308	7km WSW of Langston, Oklahoma	3.089	3.8	mwr
2015-04-17T08:37:11.200Z	35.9211	-97.33	7km WSW of Langston, Oklahoma	4.359	3.6	mwr
2015-04-16T15:49:45.820Z	36.5274	-98.9408	25km ENE of Mooreland, Oklahoma	8.8	3.5	ml
2015-04-15T19:12:36.800Z	36.3294	-97.5229	21km WNW of Perry, Oklahoma	6.978	3.3	ml
2015-04-15T03:25:09.600Z	36.3138	-97.5153	20km W of Perry, Oklahoma	6.438	3	ml
2015-04-13T14:10:06.100Z	36.5068	-99.0534	15km ENE of Mooreland, Oklahoma	9.177	3.5	ml
2015-04-13T12:38:59.700Z	36.077	-97.5578	14km NNE of Crescent, Oklahoma	5.06	3.3	ml
2015-04-12T22:55:56.100Z	35.949	-96.775	4km S of Cushing, Oklahoma	4.45	3.5	ml
2015-04-12T12:10:35.500Z	36.7214	-97.9331	20km WSW of Medford, Oklahoma	6.885	3.2	ml
2015-04-12T08:18:36.300Z	35.8083	-97.4164	7km S of Guthrie, Oklahoma	5.262	3	ml
2015-04-12T00:42:03.300Z	36.1195	-97.5644	18km N of Crescent, Oklahoma	5.518	3.4	ml
2015-04-11T18:58:39.600Z	36.511	-99.0309	17km ENE of Mooreland, Oklahoma	7.231	3.1	ml
2015-04-10T10:07:32.600Z	35.811	-97.234	14km S of Langston, Oklahoma	5.75	3.2	ml
2015-04-09T18:40:31.700Z	36.1254	-97.5508	19km NNE of Crescent, Oklahoma	5	3	ml
2015-04-09T09:29:39.900Z	35.6249	-97.2047	4km SSW of Luther, Oklahoma	5.393	3.2	ml
2015-04-09T03:38:08.500Z	36.7222	-97.8312	12km SW of Medford, Oklahoma	5.95	3	ml
2015-04-08T20:52:00.500Z	35.8192	-97.4191	6km S of Guthrie, Oklahoma	2.487	4	mwr
2015-04-08T20:47:35.100Z	35.8219	-97.424	6km S of Guthrie, Oklahoma	4.722	3.1	ml
2015-04-08T03:15:48.100Z	36.266	-97.2674	3km SE of Perry, Oklahoma	4.852	3	ml
2015-04-08T01:47:51.800Z	36.1867	-97.0295	8km NNE of Stillwater, Oklahoma	4.65	3.2	ml
2015-04-08T01:42:11.900Z	36.2826	-97.5171	20km W of Perry, Oklahoma	2.723	3	ml
2015-04-07T22:10:14.200Z	36.5024	-97.1509	22km SSW of McCord, Oklahoma	6.822	3	ml
2015-04-07T21:21:24.200Z	36.8895	-98.1974	20km NE of Cherokee, Oklahoma	4.651	3.3	ml
2015-04-07T17:15:12.000Z	36.3306	-97.525	21km WNW of Perry, Oklahoma	6.866	3.5	mwr
2015-04-07T03:52:17.100Z	36.3699	-97.8308	5km SE of Enid, Oklahoma	5.734	3.1	ml
2015-04-06T15:37:00.900Z	36.6331	-97.6504	20km SSE of Medford, Oklahoma	6.364	3.1	ml
2015-04-06T15:30:23.600Z	36.6338	-97.6574	20km SSE of Medford, Oklahoma	5.226	3.9	mwr
2015-04-06T09:01:41.900Z	36.5112	-99.0454	16km ENE of Mooreland, Oklahoma	8.848	3.2	ml
2015-04-06T01:33:45.550Z	37.0546	-98.0244	10km S of Anthony, Kansas	7.41	3	mb_lg
2015-04-05T10:22:21.800Z	36.4674	-97.322	19km N of Perry, Oklahoma	7.305	3.2	ml
2015-04-05T04:49:13.500Z	36.5043	-97.1452	21km SSW of McCord, Oklahoma	6.907	3.1	ml
2015-04-04T16:15:59.400Z	35.9529	-96.7804	3km SSW of Cushing, Oklahoma	4.48	3	ml
2015-04-04T13:21:17.000Z	36.1176	-97.5717	18km N of Crescent, Oklahoma	5.047	4.1	mwr
2015-04-04T09:11:54.200Z	36.3284	-97.5268	21km WNW of Perry, Oklahoma	6.828	3	ml
2015-04-04T08:35:30.000Z	36.3308	-97.5282	22km WNW of Perry, Oklahoma	6.088	3.4	mwr
2015-04-04T05:02:35.700Z	36.1166	-97.5719	18km N of Crescent, Oklahoma	5	3.3	mwr
2015-04-04T04:10:30.100Z	36.5113	-99.0518	15km ENE of Mooreland, Oklahoma	9.772	3.2	ml
2015-04-04T00:49:59.200Z	36.1163	-97.5638	18km N of Crescent, Oklahoma	5.268	3.7	mwr
2015-04-04T00:48:01.800Z	36.9384	-97.634	10km SSW of Caldwell, Kansas	4.713	3	ml
2015-04-04T00:20:01.600Z	36.9402	-97.6337	10km SSW of Caldwell, Kansas	5.394	3.4	ml
2015-04-03T21:28:36.800Z	36.6888	-97.6795	13km SSE of Medford, Oklahoma	5.977	3.4	ml
2015-04-03T20:54:00.800Z	36.4872	-98.1516	12km ESE of Helena, Oklahoma	6.912	3.3	ml
2015-04-03T02:16:49.600Z	36.4876	-98.1637	11km SE of Helena, Oklahoma	5.599	3.2	mwr

Table 2-3 - Revision 0
Historical Earthquakes in Oklahoma
Greater than 3.0 Magnitude
(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2015-04-02T03:58:11.000Z	36.1186	-97.5638	18km N of Crescent, Oklahoma	5.428	3.4	ml
2015-04-02T03:05:17.700Z	36.1193	-97.5614	18km N of Crescent, Oklahoma	4.842	3.3	ml
2015-04-02T02:10:47.900Z	36.7753	-98.0307	26km W of Medford, Oklahoma	5.301	3.5	ml
2015-04-02T00:46:14.200Z	36.5989	-97.605	25km SSE of Medford, Oklahoma	5.824	3.1	ml
2015-04-01T23:03:14.600Z	36.5967	-97.6077	25km SSE of Medford, Oklahoma	6.13	3.1	ml
2015-04-01T19:19:31.700Z	36.122	-97.5648	18km N of Crescent, Oklahoma	5.459	3.2	ml
2015-03-31T16:23:07.000Z	36.921	-97.7934	13km NNW of Medford, Oklahoma	2.634	3	ml
2015-03-31T15:21:07.600Z	36.6028	-97.6158	24km SSE of Medford, Oklahoma	2.713	3.4	ml
2015-03-31T14:46:54.900Z	36.3262	-97.5257	21km W of Perry, Oklahoma	2.554	3	ml
2015-03-31T03:42:40.400Z	36.784	-98.0176	25km W of Medford, Oklahoma	6.37	3	ml
2015-03-30T14:17:34.200Z	36.3569	-97.0974	18km ENE of Perry, Oklahoma	5	3	ml
2015-03-30T06:06:15.200Z	36.112	-97.232	15km W of Stillwater, Oklahoma	5.147	3	ml
2015-03-30T05:57:32.000Z	36.1145	-97.2318	15km W of Stillwater, Oklahoma	5.499	3.1	ml
2015-03-29T05:06:01.100Z	35.8139	-97.4515	7km SSW of Guthrie, Oklahoma	6.7	3	ml
2015-03-28T11:23:09.000Z	36.506	-99.025	17km ENE of Mooreland, Oklahoma	7.081	3.1	ml
2015-03-28T11:08:53.700Z	36.5153	-99.0166	18km ENE of Mooreland, Oklahoma	8.74	3.4	ml
2015-03-28T10:12:06.400Z	36.8513	-97.6991	5km NNE of Medford, Oklahoma	6.477	3.1	ml
2015-03-27T20:20:33.680Z	37.0406	-97.9129	16km SE of Anthony, Kansas	7.48	3.1	mb_lg
2015-03-27T16:39:03.700Z	36.1138	-97.2342	15km W of Stillwater, Oklahoma	4.778	3.3	ml
2015-03-27T10:32:16.100Z	36.194	-97.0065	9km NNE of Stillwater, Oklahoma	5.212	3	ml
2015-03-26T22:16:18.100Z	36.776	-98.0271	26km W of Medford, Oklahoma	6.514	3.2	ml
2015-03-25T17:33:58.700Z	35.65	-97.3673	10km E of Edmond, Oklahoma	5.181	3.2	ml
2015-03-25T08:54:47.800Z	36.1171	-97.3021	19km S of Perry, Oklahoma	5	3.1	ml
2015-03-25T03:15:16.800Z	36.2715	-97.3781	8km WSW of Perry, Oklahoma	5.567	3.5	ml
2015-03-25T00:15:26.900Z	36.5999	-97.6278	24km SSE of Medford, Oklahoma	5.234	3.4	mwr
2015-03-25T00:10:57.300Z	36.7746	-98.0299	26km W of Medford, Oklahoma	6.728	3.2	ml
2015-03-24T23:53:17.700Z	36.4455	-97.7278	14km ENE of Enid, Oklahoma	4.545	3.2	ml
2015-03-24T23:45:59.400Z	36.4449	-97.7286	14km ENE of Enid, Oklahoma	4.766	3	ml
2015-03-24T20:25:04.900Z	36.3309	-97.5195	21km WNW of Perry, Oklahoma	6.795	3.5	mb_lg
2015-03-24T19:48:28.900Z	36.7776	-98.0301	26km W of Medford, Oklahoma	6.513	4	ml
2015-03-24T15:35:55.620Z	37.0868	-97.6332	6km NNW of Caldwell, Kansas	5	3.2	mb_lg
2015-03-24T15:31:51.490Z	37.105	-97.6504	8km NNW of Caldwell, Kansas	5.89	3.7	mwr
2015-03-24T14:31:36.300Z	36.5423	-98.3807	9km W of Helena, Oklahoma	5	3.1	ml
2015-03-24T13:54:43.700Z	36.0784	-97.2242	15km WSW of Stillwater, Oklahoma	5.269	3.2	ml
2015-03-24T10:07:14.700Z	36.5177	-99.0043	19km ENE of Mooreland, Oklahoma	7.408	3.3	ml
2015-03-24T09:45:37.000Z	36.5166	-98.9862	21km ENE of Mooreland, Oklahoma	5	3	ml
2015-03-24T09:39:13.700Z	36.5175	-98.9563	23km ENE of Mooreland, Oklahoma	0.416	3.5	ml
2015-03-24T00:27:27.900Z	36.3561	-97.1119	17km ENE of Perry, Oklahoma	0.835	3.7	mwr
2015-03-23T23:29:54.500Z	36.6336	-97.6539	20km SSE of Medford, Oklahoma	2.588	3.9	mwr
2015-03-23T21:41:29.000Z	36.7829	-98.0248	26km W of Medford, Oklahoma	7.012	3	ml
2015-03-23T20:16:15.300Z	36.1222	-97.5663	18km N of Crescent, Oklahoma	4.214	3.6	mwr
2015-03-23T17:17:30.600Z	35.7913	-96.9873	13km NW of Chandler, Oklahoma	5.275	3.6	mwr
2015-03-23T16:23:42.500Z	36.782	-98.0207	25km W of Medford, Oklahoma	5.76	3.3	ml
2015-03-23T16:18:19.400Z	36.7831	-98.0238	26km W of Medford, Oklahoma	6.811	3.3	ml
2015-03-23T07:24:26.700Z	36.782	-98.0303	26km W of Medford, Oklahoma	6.601	3.6	ml
2015-03-22T22:45:22.900Z	36.3321	-97.5171	21km WNW of Perry, Oklahoma	6.626	3.4	ml
2015-03-22T11:12:09.900Z	36.3321	-97.1971	9km ENE of Perry, Oklahoma	5	3.3	ml
2015-03-21T19:58:36.000Z	36.2596	-97.2549	4km SE of Perry, Oklahoma	4.677	3.4	mwr
2015-03-21T19:57:37.000Z	36.2578	-97.2504	4km SE of Perry, Oklahoma	4.976	3	ml
2015-03-21T10:58:45.600Z	36.6065	-98.3812	11km NW of Helena, Oklahoma	5.97	3.2	ml
2015-03-21T10:08:51.600Z	36.3506	-97.0884	19km ENE of Perry, Oklahoma	5	3.6	mwr
2015-03-20T09:00:40.300Z	36.58	-97.597	27km WSW of Tonkawa, Oklahoma	5.656	3.2	ml
2015-03-19T14:48:32.100Z	36.6029	-97.6077	25km SSE of Medford, Oklahoma	6.114	3.1	ml
2015-03-18T18:13:34.500Z	36.7794	-98.0299	26km W of Medford, Oklahoma	6.489	3	ml
2015-03-17T23:45:32.500Z	36.5995	-97.6222	25km SSE of Medford, Oklahoma	2.381	3.9	mwr
2015-03-17T05:50:10.300Z	37.0062	-97.8195	19km W of Caldwell, Kansas	5	3.2	mb_lg
2015-03-17T00:03:59.400Z	36.36	-97.1017	18km ENE of Perry, Oklahoma	4.799	3.1	ml
2015-03-16T22:46:09.300Z	35.8094	-97.2352	15km S of Langston, Oklahoma	7.112	3.4	ml
2015-03-16T15:28:46.900Z	35.812	-97.2366	14km S of Langston, Oklahoma	5.73	3	ml
2015-03-16T14:15:51.500Z	35.8121	-97.2395	14km S of Langston, Oklahoma	4.3	3	ml
2015-03-16T13:19:00.700Z	35.8053	-97.233	15km S of Langston, Oklahoma	6.955	3.2	ml
2015-03-16T05:48:27.110Z	37.2107	-97.8802	14km ENE of Anthony, Kansas	8.63	3.5	mb_lg
2015-03-15T05:10:04.200Z	36.2641	-97.2792	2km SSE of Perry, Oklahoma	5.422	3.1	ml

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Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2015-03-14T13:57:47.000Z	36.7445	-97.6287	11km SE of Medford, Oklahoma	5	3.1	ml
2015-03-13T10:04:26.500Z	36.9396	-97.635	10km SSW of Caldwell, Kansas	2.3	3.3	ml
2015-03-13T07:38:53.700Z	35.7455	-97.3819	13km NE of Edmond, Oklahoma	6.194	3.1	ml
2015-03-13T06:49:04.200Z	35.744	-97.3777	13km NE of Edmond, Oklahoma	5	3	ml
2015-03-12T20:34:02.100Z	36.6284	-97.6667	20km SSE of Medford, Oklahoma	5.274	3.9	mwr
2015-03-12T10:40:26.100Z	36.8699	-98.1167	24km ENE of Cherokee, Oklahoma	5	3.1	ml
2015-03-11T14:44:42.800Z	36.1157	-97.3075	19km S of Perry, Oklahoma	4.852	3.3	ml
2015-03-10T20:28:41.300Z	36.2651	-97.2761	2km SSE of Perry, Oklahoma	5.405	3	ml
2015-03-10T04:21:04.500Z	36.7514	-97.5342	18km ESE of Medford, Oklahoma	6.58	3.3	mwr
2015-03-09T22:28:21.000Z	35.541	-97.2425	4km SE of Jones, Oklahoma	6.048	3	ml
2015-03-09T10:48:57.000Z	35.8206	-97.4384	6km S of Guthrie, Oklahoma	4.897	3.1	mwr
2015-03-09T04:01:23.000Z	35.8144	-97.4511	7km SSW of Guthrie, Oklahoma	5	3.2	ml
2015-03-09T03:24:40.400Z	35.815	-97.4481	7km SSW of Guthrie, Oklahoma	4.525	3.7	mwr
2015-03-08T22:14:48.500Z	36.2692	-97.2888	2km S of Perry, Oklahoma	5.586	3.3	ml
2015-03-08T17:02:01.300Z	36.6146	-97.6436	22km SSE of Medford, Oklahoma	5.559	3	ml
2015-03-08T16:48:08.400Z	35.6348	-97.274	7km N of Jones, Oklahoma	5.823	3.3	mwr
2015-03-08T13:51:33.800Z	36.6304	-97.6542	20km SSE of Medford, Oklahoma	5.401	3	ml
2015-03-07T22:46:50.500Z	36.6269	-97.6678	20km SSE of Medford, Oklahoma	5.417	3.1	mwr
2015-03-07T21:11:47.200Z	36.5974	-97.6328	24km SSE of Medford, Oklahoma	5.878	3.7	mwr
2015-03-07T20:44:05.300Z	36.5987	-97.6196	25km SSE of Medford, Oklahoma	5.692	3	ml
2015-03-06T08:59:15.800Z	36.6241	-97.673	21km SSE of Medford, Oklahoma	6.374	3.1	ml
2015-03-05T21:01:04.700Z	36.195	-97.2892	10km S of Perry, Oklahoma	5.04	3	ml
2015-03-05T20:59:41.350Z	36.7917	-98.2629	9km ENE of Cherokee, Oklahoma	9.39	3.3	mb_lg
2015-03-05T20:33:09.000Z	36.8123	-98.2732	9km NE of Cherokee, Oklahoma	5.449	3.2	ml
2015-03-05T09:51:06.200Z	36.8115	-98.2774	9km NE of Cherokee, Oklahoma	5.182	3.1	ml
2015-03-03T20:05:24.700Z	36.1634	-96.9948	7km NE of Stillwater, Oklahoma	4.464	3	ml
2015-03-03T15:56:01.250Z	37.1983	-97.9048	12km ENE of Anthony, Kansas	9.91	3.8	mb_lg
2015-03-03T12:06:13.100Z	36.0569	-97.5158	13km NNE of Crescent, Oklahoma	5	3.4	ml
2015-03-02T20:06:30.900Z	36.2209	-97.6541	22km ESE of Waukomis, Oklahoma	3.917	3.2	ml
2015-03-02T19:07:53.100Z	36.2235	-97.6451	23km ESE of Waukomis, Oklahoma	3.222	3	ml
2015-03-01T08:58:54.400Z	35.9501	-96.7749	3km S of Cushing, Oklahoma	4.673	3	ml
2015-03-01T02:47:20.810Z	37.091	-97.847	17km ESE of Anthony, Kansas	7.27	3.5	mb_lg
2015-03-01T00:05:12.200Z	35.9531	-96.7739	3km S of Cushing, Oklahoma	3.88	3.2	ml
2015-02-28T20:01:04.000Z	36.1272	-97.2771	18km S of Perry, Oklahoma	4.646	3.1	ml
2015-02-27T20:23:10.300Z	36.2661	-97.3809	8km WSW of Perry, Oklahoma	6.809	3.3	ml
2015-02-26T07:32:52.300Z	36.3933	-97.287	11km N of Perry, Oklahoma	6.755	3	ml
2015-02-25T17:58:06.600Z	36.2462	-97.6035	26km E of Waukomis, Oklahoma	3.963	3.1	mb_lg
2015-02-25T17:30:38.200Z	36.9467	-97.6276	9km S of Caldwell, Kansas	7.001	3	ml
2015-02-25T02:08:22.400Z	36.8681	-98.2988	13km NNE of Cherokee, Oklahoma	5	3.3	ml
2015-02-24T18:30:10.200Z	36.6005	-97.622	24km SSE of Medford, Oklahoma	7.067	3.4	ml
2015-02-23T17:05:22.800Z	36.9431	-97.6272	10km S of Caldwell, Kansas	5	3	ml
2015-02-21T12:42:40.200Z	35.4813	-96.9471	4km WSW of Meeker, Oklahoma	6.161	3	ml
2015-02-21T06:45:43.700Z	36.6002	-97.6284	24km SSE of Medford, Oklahoma	3.267	3	ml
2015-02-21T04:47:08.300Z	36.3981	-97.2972	12km N of Perry, Oklahoma	6.096	3.1	ml
2015-02-20T09:57:59.200Z	36.5337	-98.2088	5km ESE of Helena, Oklahoma	5	3.1	ml
2015-02-20T03:24:13.600Z	35.8179	-97.4206	6km S of Guthrie, Oklahoma	6.23	3.2	ml
2015-02-19T04:06:15.040Z	35.8874	-97.2677	6km S of Langston, Oklahoma	2.23	3.1	ml
2015-02-18T21:44:46.000Z	36.537	-97.0485	15km S of McCord, Oklahoma	5.48	3	mb_lg
2015-02-18T21:36:47.400Z	36.5993	-97.6289	24km SSE of Medford, Oklahoma	5	3.1	ml
2015-02-18T19:29:13.700Z	36.5578	-98.1574	10km E of Helena, Oklahoma	5.872	3.2	ml
2015-02-18T19:10:17.500Z	36.5571	-98.1557	10km E of Helena, Oklahoma	5.535	3.4	ml
2015-02-17T17:13:19.100Z	36.5323	-98.2136	5km ESE of Helena, Oklahoma	4.514	3.6	ml
2015-02-17T15:21:48.300Z	36.0172	-97.0367	4km N of Perkins, Oklahoma	4.2	3	ml
2015-02-16T12:54:13.000Z	36.8131	-98.2783	9km NE of Cherokee, Oklahoma	3.512	3.5	ml
2015-02-16T09:50:26.200Z	35.8175	-97.449	7km SSW of Guthrie, Oklahoma	5.274	3.5	mwr
2015-02-15T18:27:08.430Z	37.1866	-97.8997	12km ENE of Anthony, Kansas	5	3.6	mwr
2015-02-15T13:15:38.700Z	36.5986	-97.6191	25km SSE of Medford, Oklahoma	5.723	3	ml
2015-02-15T06:42:49.500Z	36.5966	-97.6376	24km SSE of Medford, Oklahoma	5.214	3.3	ml
2015-02-15T04:22:05.100Z	36.5984	-97.6223	25km SSE of Medford, Oklahoma	5.317	3.3	ml
2015-02-14T19:52:08.000Z	36.5975	-97.6293	25km SSE of Medford, Oklahoma	5.419	3.1	ml
2015-02-14T18:09:22.590Z	37.0208	-97.9057	18km SE of Anthony, Kansas	6	3	mb_lg
2015-02-14T17:23:04.900Z	36.5979	-97.6329	24km SSE of Medford, Oklahoma	3.53	3.6	ml
2015-02-14T17:13:21.900Z	36.5972	-97.6316	25km SSE of Medford, Oklahoma	5	3.2	ml

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Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2015-02-14T16:39:04.600Z	36.5983	-97.6289	24km SSE of Medford, Oklahoma	5	3.8	ml
2015-02-13T17:42:40.900Z	36.9518	-97.6244	9km S of Caldwell, Kansas	6.991	3.4	mwr
2015-02-12T17:45:09.700Z	36.8911	-97.8886	16km NW of Medford, Oklahoma	3.437	3.5	ml
2015-02-12T04:51:50.700Z	36.1864	-97.0284	8km NNE of Stillwater, Oklahoma	4.77	3.2	ml
2015-02-11T23:56:32.300Z	36.7003	-97.8236	14km SW of Medford, Oklahoma	5.788	3.1	ml
2015-02-11T22:31:23.400Z	36.8113	-98.2776	9km NE of Cherokee, Oklahoma	5.839	3.3	ml
2015-02-11T17:23:58.700Z	36.6992	-97.8262	14km SW of Medford, Oklahoma	5.36	3.1	ml
2015-02-10T20:23:36.500Z	36.8383	-97.8133	7km WNW of Medford, Oklahoma	5.965	3	ml
2015-02-10T07:32:36.000Z	37.1923	-98.0212	4km NNE of Anthony, Kansas	5	3.6	mb_lg
2015-02-09T20:30:23.500Z	36.6081	-98.3483	9km NW of Helena, Oklahoma	5	3	ml
2015-02-08T10:15:13.400Z	35.8587	-97.3455	7km ESE of Guthrie, Oklahoma	6.041	3.1	ml
2015-02-08T04:41:38.700Z	36.256	-97.264	4km SSE of Perry, Oklahoma	6.1	3.3	ml
2015-02-08T04:03:37.600Z	36.943	-97.622	9km S of Caldwell, Kansas	4	3.2	ml
2015-02-07T18:40:49.500Z	36.2611	-97.2763	3km SSE of Perry, Oklahoma	5.405	3.9	mwr
2015-02-06T17:20:20.300Z	36.1264	-97.2791	18km S of Perry, Oklahoma	5	3.3	ml
2015-02-06T17:11:55.600Z	36.7309	-98.3345	3km SE of Cherokee, Oklahoma	4.066	3.1	ml
2015-02-06T16:49:05.800Z	36.7311	-98.3342	3km SE of Cherokee, Oklahoma	4.383	3.4	ml
2015-02-06T15:31:08.500Z	35.5456	-96.7584	9km NW of Prague, Oklahoma	4.959	3.1	ml
2015-02-05T22:48:24.100Z	36.9461	-97.6193	9km S of Caldwell, Kansas	2.135	3.4	ml
2015-02-05T22:24:15.500Z	36.8119	-98.2803	9km NE of Cherokee, Oklahoma	6.974	3.3	ml
2015-02-05T15:08:40.800Z	36.8147	-98.2915	8km NE of Cherokee, Oklahoma	4.381	4.2	mwr
2015-02-05T07:06:46.900Z	36.5333	-98.2166	4km ESE of Helena, Oklahoma	4.89	3.4	mwr
2015-02-05T05:09:21.900Z	36.8162	-98.2863	9km NE of Cherokee, Oklahoma	5.537	3.3	ml
2015-02-05T01:36:01.200Z	36.8909	-97.8942	17km WNW of Medford, Oklahoma	5	3.2	mb_lg
2015-02-04T18:20:48.040Z	36.814	-98.289	8km NE of Cherokee, Oklahoma	4.6	3.2	ml
2015-02-04T15:20:55.100Z	36.311	-98.1639	24km W of Waukomis, Oklahoma	7.446	3.1	ml
2015-02-04T13:20:31.880Z	37.1893	-97.9011	12km ENE of Anthony, Kansas	5	3.4	mwr
2015-02-04T09:12:35.900Z	36.8093	-98.3525	6km N of Cherokee, Oklahoma	4.764	3	ml
2015-02-03T22:19:14.370Z	37.0922	-97.6568	7km NNW of Caldwell, Kansas	5	3.4	mb_lg
2015-02-03T12:37:27.810Z	36.8402	-98.3987	10km NNW of Cherokee, Oklahoma	5	3.8	mb_lg
2015-02-03T12:37:17.400Z	36.81	-98.2847	8km NE of Cherokee, Oklahoma	6.324	3.5	ml
2015-02-02T22:09:36.850Z	36.264	-97.285	2km S of Perry, Oklahoma	6.9	3.5	ml
2015-02-02T13:34:21.700Z	36.6491	-97.6634	18km SSE of Medford, Oklahoma	4.88	3.1	ml
2015-02-01T18:06:04.000Z	36.9454	-97.6297	9km SSW of Caldwell, Kansas	4.842	3.7	mwr
2015-01-30T14:24:22.100Z	36.8078	-98.3641	5km N of Cherokee, Oklahoma	3.798	3.6	mwr
2015-01-30T00:07:31.600Z	35.5882	-97.3994	7km NNW of Spencer, Oklahoma	6.97	3.2	ml
2015-01-29T21:55:09.300Z	36.3091	-98.1676	24km W of Waukomis, Oklahoma	6.79	3	ml
2015-01-29T20:44:42.200Z	36.9447	-97.6307	9km SSW of Caldwell, Kansas	6.031	3.3	ml
2015-01-29T20:21:38.710Z	37.1852	-97.8565	15km ENE of Anthony, Kansas	5	3.4	mwr
2015-01-29T19:38:30.800Z	35.5391	-96.7613	9km NW of Prague, Oklahoma	5	3.3	ml
2015-01-29T05:58:18.090Z	37.1005	-97.6359	7km NNW of Caldwell, Kansas	6.49	3.1	mb_lg
2015-01-29T03:33:26.900Z	37.0832	-97.633	6km NNW of Caldwell, Kansas	5	3.1	mb_lg
2015-01-28T17:42:02.620Z	37.2079	-97.8753	15km ENE of Anthony, Kansas	5	3	mb_lg
2015-01-28T15:48:35.100Z	36.6159	-97.705	21km S of Medford, Oklahoma	4.912	3	ml
2015-01-28T13:22:37.800Z	36.8092	-98.3628	6km N of Cherokee, Oklahoma	3.778	3	ml
2015-01-28T09:33:50.000Z	35.5399	-97.2314	5km NE of Choctaw, Oklahoma	6.809	3.2	ml
2015-01-28T05:39:46.200Z	36.1271	-97.2758	18km S of Perry, Oklahoma	5.131	3.2	mb_lg
2015-01-27T17:47:01.600Z	36.2556	-97.2621	4km SSE of Perry, Oklahoma	4.905	3	ml
2015-01-27T16:55:17.700Z	36.631	-97.7064	19km S of Medford, Oklahoma	5.438	3.2	ml
2015-01-27T16:10:55.700Z	36.9543	-97.6184	8km S of Caldwell, Kansas	7.886	3.1	ml
2015-01-27T15:58:40.100Z	36.6288	-97.7124	19km S of Medford, Oklahoma	5	4	mwr
2015-01-27T11:36:36.600Z	36.2589	-97.2787	3km SSE of Perry, Oklahoma	5	3.5	mb_lg
2015-01-27T11:31:09.800Z	36.2618	-97.2643	3km SE of Perry, Oklahoma	3.408	4.2	mwr
2015-01-27T07:38:05.100Z	37.0817	-97.6618	7km NW of Caldwell, Kansas	4.21	3.4	mb_lg
2015-01-27T05:28:53.580Z	37.0805	-97.6717	7km NW of Caldwell, Kansas	5.68	3.1	mb_lg
2015-01-26T23:46:23.200Z	36.5572	-98.6461	27km S of Alva, Oklahoma	13.733	3.1	mb_lg
2015-01-26T21:45:13.900Z	35.8082	-97.4173	7km S of Guthrie, Oklahoma	6.034	3.2	mb_lg
2015-01-26T19:30:44.700Z	36.8479	-97.7016	5km NNE of Medford, Oklahoma	6.863	4.2	ml
2015-01-26T00:18:29.500Z	36.2309	-97.5771	26km WSW of Perry, Oklahoma	6.084	3.2	mb_lg
2015-01-25T09:36:32.200Z	36.9524	-97.6149	8km S of Caldwell, Kansas	5.737	3.7	mwr
2015-01-25T07:29:34.200Z	36.1268	-97.2785	18km S of Perry, Oklahoma	4.762	3.2	mb_lg
2015-01-24T20:38:45.400Z	36.8215	-97.7019	3km ENE of Medford, Oklahoma	5	3.4	ml
2015-01-24T15:36:46.500Z	36.8067	-98.3602	5km N of Cherokee, Oklahoma	4.565	3.4	mwr

Table 2-3 - Revision 0
Historical Earthquakes in Oklahoma
Greater than 3.0 Magnitude
(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2015-01-24T02:23:24.400Z	36.367	-98.057	16km W of Enid, Oklahoma	7	3.6	mb_lg
2015-01-23T21:49:00.000Z	36.6544	-97.6395	18km SSE of Medford, Oklahoma	5.084	3.2	ml
2015-01-23T04:00:41.470Z	37.0946	-97.6561	8km NNW of Caldwell, Kansas	5.07	3.7	mb_lg
2015-01-22T05:36:27.600Z	36.1299	-97.2733	17km S of Perry, Oklahoma	5.09	3.1	mb_lg
2015-01-22T03:23:22.300Z	36.9312	-97.6441	11km SSW of Caldwell, Kansas	2.275	3.1	ml
2015-01-20T15:27:03.300Z	36.9395	-97.6179	10km S of Caldwell, Kansas	1.649	3.5	mwr
2015-01-20T00:25:47.400Z	36.8046	-98.1662	17km ENE of Cherokee, Oklahoma	6.086	3.1	mb_lg
2015-01-19T21:17:09.900Z	36.2881	-96.8017	5km S of Pawnee, Oklahoma	3.966	3	ml
2015-01-19T14:48:13.400Z	36.2908	-96.811	5km S of Pawnee, Oklahoma	3.947	3.4	mb_lg
2015-01-19T10:19:20.200Z	36.8025	-98.1959	15km ENE of Cherokee, Oklahoma	4.268	3.8	mwr
2015-01-19T09:54:31.660Z	37.2146	-97.8723	15km ENE of Anthony, Kansas	5	3.5	mwr
2015-01-19T01:01:03.300Z	36.8175	-97.709	2km ENE of Medford, Oklahoma	4.946	3.8	ml
2015-01-18T23:54:38.800Z	36.9745	-97.8559	21km NNW of Medford, Oklahoma	5	3.1	ml
2015-01-18T16:23:04.600Z	36.7234	-97.8273	12km SW of Medford, Oklahoma	4.952	3	mb_lg
2015-01-18T10:17:26.700Z	36.7989	-98.2708	9km ENE of Cherokee, Oklahoma	6.003	3.1	mb_lg
2015-01-17T22:42:13.200Z	35.8936	-97.2665	5km S of Langston, Oklahoma	6.898	3.2	ml
2015-01-17T17:47:26.100Z	36.2888	-96.8061	5km S of Pawnee, Oklahoma	5	3.1	mb_lg
2015-01-17T06:33:41.400Z	36.603	-98.2171	7km NE of Helena, Oklahoma	5	3.4	mb_lg
2015-01-17T01:04:17.100Z	36.93	-98.0313	24km S of Anthony, Kansas	5	3.2	ml
2015-01-16T22:29:34.000Z	36.6032	-97.6125	25km SSE of Medford, Oklahoma	5.645	3.4	ml
2015-01-16T13:41:31.600Z	36.4888	-99.0853	12km ENE of Mooreland, Oklahoma	7.684	3.1	ml
2015-01-16T06:53:31.300Z	36.9377	-97.9071	21km NW of Medford, Oklahoma	4.546	3	ml
2015-01-16T03:58:19.400Z	35.8155	-97.4399	7km S of Guthrie, Oklahoma	6	3.1	mb_lg
2015-01-15T18:47:20.800Z	36.9524	-97.6149	8km S of Caldwell, Kansas	5.049	3.6	ml
2015-01-15T07:47:28.100Z	36.715	-97.8734	16km SW of Medford, Oklahoma	5.58	3.1	mb_lg
2015-01-15T07:36:31.200Z	36.3294	-97.5209	21km WNW of Perry, Oklahoma	7.045	3.3	ml
2015-01-15T06:57:07.400Z	36.9518	-97.6158	8km S of Caldwell, Kansas	5	3	ml
2015-01-14T18:23:11.800Z	35.8765	-97.2447	7km S of Langston, Oklahoma	5.269	3	ml
2015-01-14T03:45:52.000Z	36.7276	-98.3125	4km SE of Cherokee, Oklahoma	4.915	3.3	ml
2015-01-14T01:42:36.000Z	36.3318	-97.516	20km WNW of Perry, Oklahoma	7.158	3.1	ml
2015-01-14T00:46:27.600Z	36.7537	-97.5552	16km ESE of Medford, Oklahoma	5	3.1	mb_lg
2015-01-14T00:06:42.400Z	35.8085	-97.4146	7km S of Guthrie, Oklahoma	6.712	3	mb_lg
2015-01-13T09:59:46.400Z	36.8175	-97.7066	2km ENE of Medford, Oklahoma	5.5	3.6	mb_lg
2015-01-13T02:10:25.200Z	35.8755	-97.2394	7km S of Langston, Oklahoma	6.577	3.1	ml
2015-01-11T10:28:21.900Z	35.805	-97.4063	8km SSE of Guthrie, Oklahoma	6.686	3.4	mwr
2015-01-10T16:36:26.260Z	37.1703	-97.9438	7km ENE of Anthony, Kansas	5	3.2	mb_lg
2015-01-10T13:27:25.000Z	36.23	-97.57	26km WSW of Perry, Oklahoma	5	3.2	ml
2015-01-10T08:39:19.100Z	36.9163	-97.7994	13km NNW of Medford, Oklahoma	3.081	3	ml
2015-01-10T06:14:03.300Z	36.2699	-97.2469	4km ESE of Perry, Oklahoma	5.329	3.2	mb_lg
2015-01-10T05:06:52.600Z	36.2627	-97.2732	3km SSE of Perry, Oklahoma	4.949	3.1	mb_lg
2015-01-10T04:26:07.500Z	35.8136	-97.4153	7km S of Guthrie, Oklahoma	7.063	3	ml
2015-01-09T16:51:50.400Z	36.2886	-96.8926	9km SW of Pawnee, Oklahoma	4.898	3.3	ml
2015-01-09T16:39:48.700Z	36.2842	-96.9784	16km WSW of Pawnee, Oklahoma	5.284	3.5	ml
2015-01-09T06:53:57.200Z	35.8159	-97.4212	7km S of Guthrie, Oklahoma	7.452	3.1	ml
2015-01-09T06:44:16.400Z	35.8143	-97.418	7km S of Guthrie, Oklahoma	6.593	3.5	mwr
2015-01-08T22:03:42.200Z	36.5852	-98.4708	18km WNW of Helena, Oklahoma	5	3	ml
2015-01-08T05:06:59.800Z	36.8723	-98.1351	23km ENE of Cherokee, Oklahoma	7.034	3	ml
2015-01-07T19:41:37.900Z	35.8173	-97.4291	6km S of Guthrie, Oklahoma	6.933	3.8	mwr
2015-01-06T23:10:48.300Z	36.6932	-97.6764	13km SSE of Medford, Oklahoma	4.809	3	ml
2015-01-06T18:28:04.200Z	36.2592	-97.2609	4km SE of Perry, Oklahoma	5.572	3.1	ml
2015-01-06T15:45:15.300Z	36.2591	-97.26	4km SE of Perry, Oklahoma	5.456	3.1	ml
2015-01-05T22:27:39.800Z	36.2603	-97.2616	4km SE of Perry, Oklahoma	4.356	3.6	mwr
2015-01-05T22:06:43.600Z	36.2611	-97.2623	3km SE of Perry, Oklahoma	5	3.6	mwr
2015-01-05T13:52:06.700Z	36.7453	-98.1112	21km E of Cherokee, Oklahoma	6.522	3.1	ml
2015-01-05T12:57:34.830Z	37.0214	-98.0891	15km SSW of Anthony, Kansas	5	3	mb_lg
2015-01-05T12:14:19.800Z	36.7411	-98.1117	21km E of Cherokee, Oklahoma	6.598	3.5	ml
2015-01-04T21:37:01.300Z	35.8196	-97.4362	6km S of Guthrie, Oklahoma	6.604	3.6	mwr
2015-01-04T10:55:39.800Z	37.2454	-98.0233	4km S of Harper, Kansas	4.87	3.5	mb_lg
2015-01-03T18:28:47.200Z	36.853	-98.2769	13km NNE of Cherokee, Oklahoma	6.269	3	ml
2015-01-03T16:54:48.400Z	36.6592	-97.6265	18km SSE of Medford, Oklahoma	5	3.4	ml
2015-01-03T12:16:30.600Z	36.8466	-97.8137	8km WNW of Medford, Oklahoma	6.076	3.4	ml
2015-01-02T16:52:28.500Z	36.2859	-96.8989	10km SW of Pawnee, Oklahoma	4.005	3	ml
2015-01-02T09:23:24.200Z	36.7301	-98.3055	5km ESE of Cherokee, Oklahoma	5.566	3.1	ml

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Preparer: D. Horne; Date: 02/15/21
Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2015-01-02T00:19:33.300Z	36.8885	-98.2399	18km NE of Cherokee, Oklahoma	6.652	3.1	ml
2015-01-01T14:44:08.500Z	36.8137	-97.71	2km ENE of Medford, Oklahoma	3.2	3.6	ml
2015-01-01T12:05:49.100Z	36.929	-97.4929	15km SE of Caldwell, Kansas	6.535	3.1	ml
2015-01-01T00:26:09.600Z	36.6558	-97.6348	18km SSE of Medford, Oklahoma	5.319	3	ml
2014-12-31T07:19:10.200Z	36.7211	-98.1713	16km ESE of Cherokee, Oklahoma	5.836	3.1	ml
2014-12-30T21:37:24.900Z	36.7251	-98.3084	5km SE of Cherokee, Oklahoma	5.485	3.8	ml
2014-12-30T21:24:51.100Z	36.7255	-98.3075	5km SE of Cherokee, Oklahoma	5.55	3.9	ml
2014-12-30T15:11:50.100Z	36.5709	-98.3251	5km WNW of Helena, Oklahoma	5	3.1	ml
2014-12-30T12:43:58.900Z	36.3619	-97.4506	16km WNW of Perry, Oklahoma	6.495	3.1	ml
2014-12-30T11:05:53.500Z	36.6252	-97.7233	20km S of Medford, Oklahoma	6.548	3	ml
2014-12-29T17:50:55.000Z	36.7545	-98.1778	15km E of Cherokee, Oklahoma	5	3.1	ml
2014-12-29T16:15:55.200Z	36.8363	-97.8757	13km WNW of Medford, Oklahoma	4.874	3.3	ml
2014-12-29T08:30:05.100Z	36.361	-97.4511	16km WNW of Perry, Oklahoma	5	3	ml
2014-12-28T10:02:56.700Z	35.8147	-97.4181	7km S of Guthrie, Oklahoma	7.123	3	ml
2014-12-27T16:39:57.000Z	36.2837	-96.8918	9km SW of Pawnee, Oklahoma	4.466	3.4	ml
2014-12-27T11:17:14.500Z	35.9107	-97.2513	3km S of Langston, Oklahoma	4.832	3	ml
2014-12-27T03:21:36.200Z	35.8143	-97.4177	7km S of Guthrie, Oklahoma	6.738	3	ml
2014-12-26T18:03:37.500Z	35.8104	-97.416	7km S of Guthrie, Oklahoma	5.483	3.1	ml
2014-12-26T17:12:57.300Z	36.8021	-98.1623	18km ENE of Cherokee, Oklahoma	5	3	ml
2014-12-25T23:11:36.400Z	36.368	-97.0684	21km ENE of Perry, Oklahoma	1.98	3.9	ml
2014-12-25T20:32:49.500Z	35.8124	-97.4167	7km S of Guthrie, Oklahoma	6.945	3.5	mwr
2014-12-23T20:35:28.400Z	36.8913	-97.6911	10km NNE of Medford, Oklahoma	5.554	3	ml
2014-12-22T11:12:38.300Z	36.2766	-97.2252	5km ESE of Perry, Oklahoma	6.162	3	ml
2014-12-22T07:45:07.010Z	37.2649	-97.9365	8km ESE of Harper, Kansas	6.02	3.5	mb_lg
2014-12-22T05:05:53.500Z	36.0671	-97.3586	16km NW of Langston, Oklahoma	6.97	3	ml
2014-12-22T03:40:56.800Z	36.8024	-98.1933	15km ENE of Cherokee, Oklahoma	5	3.6	mwr
2014-12-21T18:42:55.300Z	36.6285	-97.7101	19km S of Medford, Oklahoma	4.018	3.4	ml
2014-12-21T18:36:00.100Z	36.6267	-97.7149	20km S of Medford, Oklahoma	4.664	3.4	ml
2014-12-21T15:44:05.800Z	36.9379	-97.7253	14km SW of Caldwell, Kansas	1.487	3.3	ml
2014-12-21T08:53:23.400Z	36.5278	-98.227	4km ESE of Helena, Oklahoma	4.215	3	ml
2014-12-21T05:59:04.100Z	36.761	-97.5719	15km ESE of Medford, Oklahoma	7.594	3.1	ml
2014-12-21T01:17:09.400Z	36.1751	-97.3867	15km SW of Perry, Oklahoma	5.187	3	ml
2014-12-19T13:18:08.200Z	36.7564	-97.5659	15km ESE of Medford, Oklahoma	4.474	3.3	ml
2014-12-18T23:06:54.000Z	36.1511	-97.4904	23km SW of Perry, Oklahoma	4.659	3.4	mwr
2014-12-16T17:18:35.600Z	36.8689	-98.1236	24km ENE of Cherokee, Oklahoma	5.638	3.1	ml
2014-12-16T17:01:26.800Z	36.8676	-98.1224	24km ENE of Cherokee, Oklahoma	5.69	3.4	ml
2014-12-15T18:22:17.000Z	35.4929	-96.8293	6km E of Meeker, Oklahoma	6.581	3	ml
2014-12-15T17:01:56.700Z	36.1821	-97.3721	14km SSW of Perry, Oklahoma	5.78	3.2	ml
2014-12-15T02:32:50.700Z	36.3126	-96.7571	5km SE of Pawnee, Oklahoma	4.047	3	ml
2014-12-14T22:22:55.200Z	36.3274	-97.5262	21km W of Perry, Oklahoma	6.641	3.2	ml
2014-12-14T21:18:20.500Z	36.3187	-96.7553	4km ESE of Pawnee, Oklahoma	4.679	4	mwr
2014-12-14T21:07:13.400Z	36.3245	-97.5351	22km W of Perry, Oklahoma	6.649	3.1	ml
2014-12-14T16:09:47.500Z	36.3274	-97.5343	22km W of Perry, Oklahoma	5.511	3	ml
2014-12-14T15:48:41.600Z	36.3258	-97.5324	22km W of Perry, Oklahoma	6.423	3.8	ml
2014-12-14T10:19:54.700Z	36.3176	-96.7569	4km ESE of Pawnee, Oklahoma	5.221	3.1	ml
2014-12-14T09:14:21.100Z	36.8706	-98.1272	24km ENE of Cherokee, Oklahoma	5.413	3.9	mwr
2014-12-14T05:01:42.300Z	36.3251	-97.5296	22km W of Perry, Oklahoma	6.574	3	ml
2014-12-13T09:51:30.700Z	36.3241	-97.5347	22km W of Perry, Oklahoma	6.495	3.6	ml
2014-12-12T19:48:36.900Z	36.2623	-97.0378	16km N of Stillwater, Oklahoma	5.088	3.3	ml
2014-12-12T11:31:46.400Z	36.3524	-97.091	19km ENE of Perry, Oklahoma	8.474	3.3	ml
2014-12-11T20:51:03.200Z	36.8707	-98.1223	24km ENE of Cherokee, Oklahoma	5.615	3.4	ml
2014-12-11T19:57:45.800Z	36.9511	-97.7998	17km NNW of Medford, Oklahoma	5	3.1	ml
2014-12-11T07:53:49.400Z	36.7616	-98.0542	27km E of Cherokee, Oklahoma	3.663	3.8	mwr
2014-12-10T17:43:23.700Z	36.1473	-97.0076	5km NE of Stillwater, Oklahoma	5.516	3	ml
2014-12-10T16:47:45.300Z	36.8722	-98.1235	24km ENE of Cherokee, Oklahoma	5.318	3	ml
2014-12-10T10:09:13.900Z	35.8176	-97.4329	6km S of Guthrie, Oklahoma	4.865	3.1	ml
2014-12-10T06:39:25.200Z	36.8405	-97.8152	8km WNW of Medford, Oklahoma	5.651	3.1	ml
2014-12-09T08:38:01.300Z	36.751	-97.556	17km ESE of Medford, Oklahoma	4.531	3.2	ml
2014-12-09T06:28:33.100Z	35.8188	-96.8213	14km NNE of Chandler, Oklahoma	6.036	3.7	ml
2014-12-08T14:05:51.800Z	35.7378	-97.5863	13km NW of Edmond, Oklahoma	6.978	3.2	ml
2014-12-07T22:13:08.300Z	35.8197	-97.4393	6km S of Guthrie, Oklahoma	5.147	3.6	mwr
2014-12-07T20:57:22.500Z	34.1752	-96.7559	9km N of Madill, Oklahoma	5	3	ml
2014-12-06T07:04:22.100Z	36.7612	-98.0514	27km E of Cherokee, Oklahoma	5.8	3.2	ml

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Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2014-12-05T03:54:22.500Z	36.023	-97.0946	7km NW of Perkins, Oklahoma	4.007	3.7	mwr
2014-12-04T23:29:58.800Z	35.8999	-97.2543	5km S of Langston, Oklahoma	4.961	3.1	ml
2014-12-04T18:04:17.800Z	36.758	-97.5781	14km ESE of Medford, Oklahoma	5	3.5	ml
2014-12-04T11:34:52.300Z	36.2871	-97.4335	13km W of Perry, Oklahoma	7.177	3	ml
2014-12-04T09:47:43.520Z	37.1969	-98.0016	5km NNE of Anthony, Kansas	6.68	3.1	mb_lg
2014-12-04T08:38:29.400Z	36.4207	-97.2902	14km N of Perry, Oklahoma	7.671	3	ml
2014-12-04T06:39:43.300Z	35.8197	-97.4383	6km S of Guthrie, Oklahoma	5	3.2	mwr
2014-12-03T13:33:33.600Z	36.5021	-99.0279	17km ENE of Mooreland, Oklahoma	6.661	3.7	ml
2014-12-02T16:25:53.500Z	36.1767	-97.2641	12km S of Perry, Oklahoma	4.973	3	ml
2014-12-02T12:40:13.520Z	37.2621	-97.6335	14km S of Conway Springs, Kansas	7.78	3	mb_lg
2014-12-02T12:04:29.400Z	35.671	-97.3788	9km ENE of Edmond, Oklahoma	7.103	3.4	mwr
2014-12-01T17:57:28.700Z	36.4955	-99.0834	12km ENE of Mooreland, Oklahoma	8.502	3.3	mwr
2014-11-30T12:18:58.700Z	35.6727	-97.3788	9km ENE of Edmond, Oklahoma	6.265	3.3	mwr
2014-11-30T10:24:44.400Z	36.6028	-97.6068	25km SSE of Medford, Oklahoma	5.684	4	mwr
2014-11-30T08:54:36.000Z	36.6013	-97.7654	22km S of Medford, Oklahoma	5	3	ml
2014-11-30T06:59:56.000Z	35.5382	-96.7714	9km NW of Prague, Oklahoma	6.89	3.6	mwr
2014-11-28T08:36:36.100Z	36.6286	-97.981	27km NNW of Enid, Oklahoma	5.846	3	ml
2014-11-28T03:35:25.900Z	36.8192	-97.711	2km NE of Medford, Oklahoma	4.853	3	ml
2014-11-27T00:54:23.900Z	36.5886	-97.8084	22km NNE of Enid, Oklahoma	6.198	3.1	ml
2014-11-26T19:29:19.000Z	35.8173	-97.4303	6km S of Guthrie, Oklahoma	5.551	3	ml
2014-11-26T16:54:04.400Z	36.1146	-97.3101	19km S of Perry, Oklahoma	4.272	3.1	ml
2014-11-26T14:56:40.600Z	35.8153	-97.419	7km S of Guthrie, Oklahoma	5.314	3.3	ml
2014-11-26T09:14:25.800Z	36.8171	-97.7105	2km ENE of Medford, Oklahoma	5.37	3	ml
2014-11-25T23:32:55.200Z	36.8106	-97.8672	11km W of Medford, Oklahoma	5.575	3.5	ml
2014-11-25T22:04:21.800Z	35.8184	-97.4304	6km S of Guthrie, Oklahoma	4.818	3.4	mwr
2014-11-25T14:43:40.000Z	36.8201	-97.7191	1km NE of Medford, Oklahoma	4.129	3.6	mwr
2014-11-25T01:43:39.300Z	36.8567	-97.8444	11km WNW of Medford, Oklahoma	3.901	3	ml
2014-11-25T00:16:51.700Z	35.8167	-97.4363	6km S of Guthrie, Oklahoma	5	3	ml
2014-11-24T19:05:57.500Z	36.8728	-98.3353	13km N of Cherokee, Oklahoma	5.326	3.7	mwr
2014-11-24T14:08:10.300Z	36.3264	-97.5278	21km W of Perry, Oklahoma	6.869	3	ml
2014-11-24T08:28:31.000Z	35.816	-97.433	7km S of Guthrie, Oklahoma	6.17	3.5	ml
2014-11-24T07:17:17.400Z	36.118	-97.2475	17km W of Stillwater, Oklahoma	3.956	3	ml
2014-11-24T06:55:53.700Z	36.327	-97.5289	22km W of Perry, Oklahoma	7.374	3.4	ml
2014-11-24T06:36:08.600Z	36.3276	-97.531	22km W of Perry, Oklahoma	5	3.8	mwr
2014-11-23T04:50:23.200Z	35.4947	-97.2623	0km ESE of Choctaw, Oklahoma	6.846	3	ml
2014-11-23T04:25:58.400Z	36.8291	-97.8669	12km WNW of Medford, Oklahoma	5	3.4	ml
2014-11-22T18:31:34.800Z	36.5947	-97.6484	24km SSE of Medford, Oklahoma	4.483	3.1	ml
2014-11-22T14:54:45.600Z	36.6375	-97.7712	19km S of Medford, Oklahoma	6.09	3	ml
2014-11-22T14:36:06.300Z	36.64	-97.7734	18km S of Medford, Oklahoma	6.197	3.5	ml
2014-11-22T09:39:29.000Z	36.7562	-97.5783	14km ESE of Medford, Oklahoma	5.106	3.7	ml
2014-11-22T02:39:42.000Z	36.1182	-97.4354	23km SW of Perry, Oklahoma	5.784	3.1	ml
2014-11-21T14:56:17.200Z	36.8791	-98.2434	17km NE of Cherokee, Oklahoma	4.459	3	ml
2014-11-21T13:03:42.400Z	36.8464	-97.8961	15km WNW of Medford, Oklahoma	5.469	3.3	ml
2014-11-19T14:17:29.500Z	36.9952	-97.9171	20km SSE of Anthony, Kansas	7.63	3.2	mb_lg
2014-11-19T13:28:52.700Z	36.1967	-96.7209	9km NNW of Yale, Oklahoma	5.266	3	ml
2014-11-19T12:19:02.100Z	36.8446	-97.8991	15km WNW of Medford, Oklahoma	5	3.1	ml
2014-11-19T04:06:50.900Z	36.5897	-98.2562	4km NNE of Helena, Oklahoma	6.164	3.1	ml
2014-11-19T03:34:24.700Z	35.9281	-97.4407	5km NNW of Guthrie, Oklahoma	5.895	3.3	ml
2014-11-18T21:43:55.100Z	36.2809	-96.9742	16km WSW of Pawnee, Oklahoma	5	3.4	ml
2014-11-18T16:16:07.600Z	36.8659	-98.3346	12km N of Cherokee, Oklahoma	5	3.6	ml
2014-11-17T20:40:52.300Z	36.4215	-97.037	22km WNW of Pawnee, Oklahoma	5	3	ml
2014-11-17T02:21:01.650Z	37.1918	-98.0232	4km N of Anthony, Kansas	5.57	3.1	mb_lg
2014-11-16T22:41:49.600Z	36.2796	-97.2361	4km ESE of Perry, Oklahoma	2.806	3.3	ml
2014-11-16T10:32:40.400Z	36.2777	-96.9308	13km WSW of Pawnee, Oklahoma	4.902	3.2	ml
2014-11-16T08:59:12.570Z	37.1778	-98.019	2km NNE of Anthony, Kansas	6.26	3.1	mb_lg
2014-11-16T07:26:40.100Z	36.0649	-97.3241	14km NNW of Langston, Oklahoma	4.743	3.4	ml
2014-11-15T13:39:57.600Z	36.6169	-97.7098	21km S of Medford, Oklahoma	6.204	3.4	ml
2014-11-15T10:18:13.470Z	37.2293	-98.0328	6km S of Harper, Kansas	6.4	3.8	mwr
2014-11-14T15:41:54.700Z	36.0238	-97.0914	7km NW of Perkins, Oklahoma	4.651	3	ml
2014-11-14T11:58:31.100Z	36.6258	-98.0001	25km ENE of Helena, Oklahoma	3.524	3.6	ml
2014-11-14T07:43:23.800Z	36.8431	-97.8774	13km WNW of Medford, Oklahoma	4.849	3	ml
2014-11-14T07:34:56.800Z	36.8442	-97.8855	14km WNW of Medford, Oklahoma	4.438	3.1	ml
2014-11-14T07:10:19.800Z	36.8477	-97.8768	13km WNW of Medford, Oklahoma	4.874	3	ml

Table 2-3 - Revision 0
Historical Earthquakes in Oklahoma
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(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2014-11-14T07:06:51.000Z	36.8455	-97.8767	13km WNW of Medford, Oklahoma	5.159	3.3	ml
2014-11-14T03:54:32.500Z	36.1653	-96.9009	15km ENE of Stillwater, Oklahoma	5.856	3	ml
2014-11-13T14:34:23.800Z	36.7532	-97.5616	16km ESE of Medford, Oklahoma	4.265	3.2	ml
2014-11-13T01:28:31.300Z	35.3504	-96.5389	16km SSW of Boley, Oklahoma	3.079	3.6	mwr
2014-11-12T21:40:00.550Z	37.2713	-97.6206	13km S of Conway Springs, Kansas	4.03	4.9	mww
2014-11-12T21:37:11.000Z	36.6485	-97.6016	21km SE of Medford, Oklahoma	5.37	3.1	ml
2014-11-11T23:17:11.700Z	36.765	-97.5605	16km ESE of Medford, Oklahoma	6.813	3	ml
2014-11-11T14:09:41.900Z	36.7559	-97.5648	16km ESE of Medford, Oklahoma	5.173	3.5	ml
2014-11-10T02:30:56.700Z	36.7555	-97.5646	16km ESE of Medford, Oklahoma	4.062	3.5	ml
2014-11-10T02:11:30.300Z	36.0242	-97.093	7km NW of Perkins, Oklahoma	4.74	3.1	ml
2014-11-09T20:10:18.900Z	36.0244	-97.0975	8km NW of Perkins, Oklahoma	3.412	3.8	mwr
2014-11-09T18:39:54.700Z	36.3306	-97.5206	21km WNW of Perry, Oklahoma	5	3.1	ml
2014-11-09T12:55:44.700Z	36.2761	-97.2619	2km ESE of Perry, Oklahoma	7.026	3.1	ml
2014-11-09T01:20:39.200Z	36.7135	-98.0413	27km NE of Helena, Oklahoma	4.733	3	ml
2014-11-09T00:35:15.500Z	36.3298	-97.5266	21km WNW of Perry, Oklahoma	11.185	3.3	mwr
2014-11-08T10:10:18.500Z	36.3933	-97.2978	11km N of Perry, Oklahoma	6.373	3	ml
2014-11-08T09:28:00.800Z	36.1734	-96.8468	14km WNW of Yale, Oklahoma	5.264	3	ml
2014-11-07T20:08:51.400Z	36.6065	-97.8147	23km SSW of Medford, Oklahoma	5.876	3.2	ml
2014-11-06T01:35:02.790Z	37.2082	-98.039	6km N of Anthony, Kansas	10.67	3.2	mb lg
2014-11-05T10:07:27.400Z	37.1979	-98.0516	5km NNW of Anthony, Kansas	8.09	3.2	mb lg
2014-11-05T02:05:38.700Z	36.5865	-97.7806	22km NNE of Enid, Oklahoma	5	3	ml
2014-11-04T23:13:50.300Z	35.4607	-97.0329	5km ENE of McLoud, Oklahoma	6.261	3.2	ml
2014-11-04T16:46:37.200Z	36.5872	-97.7776	23km NNE of Enid, Oklahoma	5	3	ml
2014-11-04T04:16:48.700Z	36.7535	-97.5583	16km ESE of Medford, Oklahoma	4.322	3	ml
2014-11-03T22:16:50.900Z	35.7762	-97.4563	11km SSW of Guthrie, Oklahoma	4.906	3	ml
2014-11-03T07:10:32.500Z	35.6073	-97.2105	6km SSW of Luther, Oklahoma	6.009	3.3	ml
2014-11-03T05:58:29.100Z	35.6063	-97.2121	6km SSW of Luther, Oklahoma	5.941	3	ml
2014-11-02T00:58:36.100Z	36.8427	-97.7538	4km NNW of Medford, Oklahoma	3.653	3.1	ml
2014-11-01T06:03:16.000Z	36.0481	-97.2529	11km N of Langston, Oklahoma	5	3	mwr
2014-10-31T06:22:59.400Z	36.4912	-99.0812	12km ENE of Mooreland, Oklahoma	7.446	3.4	mwr
2014-10-31T00:49:33.900Z	36.6076	-97.6706	22km SSE of Medford, Oklahoma	3.584	3.1	ml
2014-10-31T00:39:28.300Z	35.9662	-97.3781	10km NNE of Guthrie, Oklahoma	4.542	3.2	ml
2014-10-30T18:57:02.100Z	36.045	-97.2577	11km N of Langston, Oklahoma	3.793	3.3	mwr
2014-10-29T16:53:31.600Z	35.7338	-97.5268	10km NNW of Edmond, Oklahoma	5.947	3.1	mwr
2014-10-29T00:29:08.900Z	36.1112	-97.4324	22km NE of Crescent, Oklahoma	2.988	3.1	ml
2014-10-27T10:42:30.300Z	36.4996	-99.0809	12km ENE of Mooreland, Oklahoma	7.121	3.5	ml
2014-10-26T18:23:10.000Z	36.4904	-99.0885	11km ENE of Mooreland, Oklahoma	8.649	3.7	ml
2014-10-25T20:21:10.300Z	36.5062	-99.0278	17km ENE of Mooreland, Oklahoma	5	3.1	ml
2014-10-25T17:10:54.300Z	35.5446	-97.2373	5km NNE of Choctaw, Oklahoma	6.819	3.2	ml
2014-10-25T12:36:15.000Z	35.8596	-97.3044	10km SSW of Langston, Oklahoma	5	3.1	ml
2014-10-23T07:06:03.000Z	36.6797	-97.7149	14km S of Medford, Oklahoma	3.899	3.1	ml
2014-10-22T23:48:07.760Z	37.0294	-97.8876	18km SE of Anthony, Kansas	5.9	3.3	mb lg
2014-10-22T22:31:29.800Z	36.4994	-99.0632	14km ENE of Mooreland, Oklahoma	7.259	3.2	ml
2014-10-22T15:58:22.200Z	36.5028	-99.0603	14km ENE of Mooreland, Oklahoma	6.907	3.5	ml
2014-10-21T11:55:43.980Z	37.0377	-97.8947	17km SE of Anthony, Kansas	5.15	3	mb lg
2014-10-21T08:55:46.200Z	36.6352	-97.7001	19km S of Medford, Oklahoma	3.93	3	ml
2014-10-21T00:46:17.800Z	36.7435	-97.8837	15km WSW of Medford, Oklahoma	2.392	3.3	ml
2014-10-20T20:34:16.000Z	35.4166	-96.5579	10km SW of Boley, Oklahoma	4.833	3.5	ml
2014-10-20T15:35:29.500Z	36.6799	-98.1584	17km NE of Helena, Oklahoma	3.764	3	ml
2014-10-20T14:25:02.610Z	37.0422	-97.9304	15km SE of Anthony, Kansas	4.81	3.1	mb lg
2014-10-19T17:11:17.000Z	36.4931	-99.0461	15km ENE of Mooreland, Oklahoma	3.988	3	ml
2014-10-19T03:04:01.000Z	36.2797	-96.9232	12km WSW of Pawnee, Oklahoma	6.007	3	ml
2014-10-19T01:49:44.100Z	36.2821	-96.9302	12km WSW of Pawnee, Oklahoma	5	3	ml
2014-10-19T01:16:13.100Z	36.2852	-96.9284	12km WSW of Pawnee, Oklahoma	4.364	3.4	ml
2014-10-18T19:26:13.200Z	36.2042	-97.5339	24km WSW of Perry, Oklahoma	4.83	3	ml
2014-10-18T12:34:23.800Z	36.5076	-99.0579	15km ENE of Mooreland, Oklahoma	5	3	ml
2014-10-17T16:56:42.300Z	36.2135	-97.5384	24km WSW of Perry, Oklahoma	5	3.3	ml
2014-10-17T16:47:41.700Z	36.5133	-99.0507	16km ENE of Mooreland, Oklahoma	6.113	3.2	ml
2014-10-17T15:11:23.400Z	35.8185	-97.415	6km S of Guthrie, Oklahoma	5	3.2	ml
2014-10-17T12:51:54.900Z	36.5098	-99.0321	17km ENE of Mooreland, Oklahoma	5	3.1	ml
2014-10-17T12:43:48.800Z	36.5052	-99.0832	13km NE of Mooreland, Oklahoma	6.954	3	ml
2014-10-17T08:49:37.800Z	36.5042	-99.0668	14km ENE of Mooreland, Oklahoma	7.754	3.1	ml
2014-10-15T12:33:39.300Z	36.3337	-97.5823	26km W of Perry, Oklahoma	5	3	ml

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Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2014-10-15T09:51:16.200Z	36.5032	-99.0519	15km ENE of Mooreland, Oklahoma	7.859	3.5	ml
2014-10-14T18:28:32.100Z	36.3507	-97.0931	18km ENE of Perry, Oklahoma	4.531	3.1	ml
2014-10-14T06:26:18.800Z	36.6573	-97.9028	22km SW of Medford, Oklahoma	2.337	3.3	ml
2014-10-14T05:06:01.300Z	35.813	-97.4106	7km S of Guthrie, Oklahoma	3.158	3.1	ml
2014-10-14T04:55:44.800Z	36.5189	-98.4728	18km W of Helena, Oklahoma	3.502	3.3	ml
2014-10-14T01:18:06.800Z	35.4777	-97.3543	3km WSW of Nicoma Park, Oklahoma	6.238	3	ml
2014-10-13T16:03:11.590Z	36.82	-97.718	2km NE of Medford, Oklahoma	3.4	3	ml
2014-10-13T12:24:54.200Z	35.7341	-97.5254	9km NNW of Edmond, Oklahoma	5	3.2	mwr
2014-10-13T08:58:19.500Z	36.6512	-97.9235	24km SW of Medford, Oklahoma	5	3.1	ml
2014-10-13T01:44:30.100Z	36.2869	-96.9192	11km WSW of Pawnee, Oklahoma	7.708	3.2	ml
2014-10-12T19:40:43.000Z	36.6702	-98.3018	10km SSE of Cherokee, Oklahoma	3.506	3	ml
2014-10-12T16:03:25.840Z	37.2385	-97.9767	6km SE of Harper, Kansas	8.02	3.2	mb_lg
2014-10-10T17:26:20.500Z	35.7476	-97.1228	11km NE of Luther, Oklahoma	3.562	3.1	ml
2014-10-10T16:18:24.700Z	35.7503	-97.1212	11km NE of Luther, Oklahoma	3.267	3.2	mwr
2014-10-10T13:51:21.000Z	35.9466	-96.7594	4km S of Cushing, Oklahoma	5	4.2	mwr
2014-10-10T07:38:35.400Z	35.8181	-97.4177	6km S of Guthrie, Oklahoma	4.687	3	ml
2014-10-10T04:58:51.090Z	37.009	-97.976	16km SSE of Anthony, Kansas	5.5	3.2	mb_lg
2014-10-08T19:44:12.600Z	36.1773	-97.2558	12km SSE of Perry, Oklahoma	5.222	3.3	mwr
2014-10-08T01:48:28.000Z	35.7505	-97.1204	11km NE of Luther, Oklahoma	4.566	3.2	mwr
2014-10-07T23:57:39.400Z	35.944	-96.779	4km SSW of Cushing, Oklahoma	3.342	3	ml
2014-10-07T16:51:13.100Z	35.9474	-96.7642	4km S of Cushing, Oklahoma	5.28	4	mwr
2014-10-07T12:03:52.700Z	36.3156	-97.0331	20km W of Pawnee, Oklahoma	7.933	3.1	ml
2014-10-05T10:24:50.900Z	35.8171	-97.422	6km S of Guthrie, Oklahoma	4.776	3	ml
2014-10-05T01:10:31.600Z	36.6154	-98.3578	10km NW of Helena, Oklahoma	5.674	3.2	ml
2014-10-04T20:23:08.900Z	36.8451	-97.8812	13km WNW of Medford, Oklahoma	5.711	3.1	ml
2014-10-04T14:11:24.400Z	36.3083	-96.9706	15km WSW of Pawnee, Oklahoma	5	3	ml
2014-10-03T00:19:11.200Z	36.8499	-97.8521	11km WNW of Medford, Oklahoma	4.152	3.1	ml
2014-10-02T22:50:48.990Z	37.2431	-97.9651	7km SE of Harper, Kansas	5	3.1	mb_lg
2014-10-02T18:35:43.080Z	37.2397	-97.9766	6km SE of Harper, Kansas	5	3.4	mb_lg
2014-10-02T18:03:43.490Z	37.2324	-97.9748	7km SE of Harper, Kansas	5	3.1	mwr
2014-10-02T18:02:55.350Z	37.2332	-97.9668	7km SE of Harper, Kansas	5	3.5	mwr
2014-10-02T18:01:24.400Z	37.2447	-97.9553	7km SE of Harper, Kansas	5	4.3	mwr
2014-10-01T22:15:01.200Z	35.8158	-97.4202	7km S of Guthrie, Oklahoma	4.556	3	ml
2014-10-01T19:24:16.000Z	36.8599	-97.861	12km WNW of Medford, Oklahoma	4.493	3	ml
2014-10-01T18:18:55.300Z	36.7654	-97.9862	23km WSW of Medford, Oklahoma	5	3.6	ml
2014-10-01T06:11:05.130Z	37.2592	-97.9429	7km ESE of Harper, Kansas	5	3.3	mb_lg
2014-10-01T00:33:29.260Z	37.3919	-95.3825	12km WNW of Parsons, Kansas	9.22	3	mb_lg
2014-09-30T22:12:10.400Z	35.5909	-97.3945	7km NNW of Spencer, Oklahoma	6.518	3	ml
2014-09-30T16:47:57.840Z	37.2469	-97.984	5km SE of Harper, Kansas	5	3.1	mb_lg
2014-09-30T15:24:31.240Z	37.2491	-97.9718	6km SE of Harper, Kansas	5	3.1	mb_lg
2014-09-30T14:55:04.650Z	37.2212	-97.9626	9km NE of Anthony, Kansas	3.22	3.8	mwr
2014-09-30T12:30:25.910Z	37.2481	-97.9352	9km ESE of Harper, Kansas	5	3.3	mb_lg
2014-09-30T06:21:59.800Z	36.1727	-97.2471	13km SSE of Perry, Oklahoma	4.141	3	ml
2014-09-30T06:06:01.100Z	36.2142	-97.5356	23km WSW of Perry, Oklahoma	3.953	3.2	mwr
2014-09-30T05:35:36.800Z	36.2093	-97.5363	24km WSW of Perry, Oklahoma	5	3	ml
2014-09-30T03:01:25.900Z	36.2237	-97.5535	24km WSW of Perry, Oklahoma	2.2	4	mwr
2014-09-29T14:43:39.500Z	36.0776	-97.23	14km N of Langston, Oklahoma	3.999	3.1	ml
2014-09-28T02:26:03.000Z	36.3908	-97.152	16km NE of Perry, Oklahoma	5	3.2	ml
2014-09-27T12:29:20.100Z	35.8264	-97.4327	5km S of Guthrie, Oklahoma	4.442	3.1	ml
2014-09-27T12:14:49.100Z	35.82	-97.4318	6km S of Guthrie, Oklahoma	5	3.4	mwr
2014-09-26T13:27:38.500Z	36.3028	-96.9742	15km WSW of Pawnee, Oklahoma	5	3.2	ml
2014-09-24T05:49:33.700Z	36.4035	-96.7616	8km NNE of Pawnee, Oklahoma	5.417	3.5	mwr
2014-09-23T13:37:10.900Z	34.6213	-97.556	24km S of Lindsay, Oklahoma	5	3	ml
2014-09-23T10:34:00.900Z	35.8184	-97.4203	6km S of Guthrie, Oklahoma	5	3	ml
2014-09-23T07:58:02.800Z	35.4467	-96.5259	6km SW of Boley, Oklahoma	3.893	3.3	ml
2014-09-22T19:28:34.700Z	34.6292	-97.5457	23km SSE of Lindsay, Oklahoma	5	3.6	ml
2014-09-21T00:36:12.100Z	35.8207	-97.4231	6km S of Guthrie, Oklahoma	4.772	3.1	ml
2014-09-20T07:10:18.800Z	36.822	-97.7235	1km NNE of Medford, Oklahoma	3.693	3	ml
2014-09-19T17:23:17.800Z	35.8185	-97.4199	6km S of Guthrie, Oklahoma	4.281	3.6	mwr
2014-09-19T10:55:21.000Z	36.8209	-97.7187	2km NE of Medford, Oklahoma	4.408	3	ml
2014-09-19T05:08:02.900Z	36.1779	-97.2593	12km SSE of Perry, Oklahoma	5	3.3	ml
2014-09-19T01:34:34.600Z	36.6022	-97.6084	25km SSE of Medford, Oklahoma	5.26	3.3	ml
2014-09-19T01:31:53.500Z	36.6028	-97.6131	25km SSE of Medford, Oklahoma	4.564	3.8	mwr

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Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2014-09-19T00:08:03.200Z	35.818	-97.4225	6km S of Guthrie, Oklahoma	4.488	3	ml
2014-09-18T19:52:32.000Z	36.2725	-97.2529	3km ESE of Perry, Oklahoma	3.288	3.2	ml
2014-09-18T07:12:40.400Z	36.1813	-97.2693	12km S of Perry, Oklahoma	5.214	3.8	mwr
2014-09-17T13:21:54.600Z	36.1783	-97.2639	12km S of Perry, Oklahoma	3.334	3.3	mwr
2014-09-17T12:02:55.100Z	36.1468	-96.8081	10km WNW of Yale, Oklahoma	7.48	3.2	ml
2014-09-17T11:58:26.100Z	36.1479	-96.8049	10km WNW of Yale, Oklahoma	7.234	3	ml
2014-09-17T11:09:05.200Z	36.846	-97.8781	13km WNW of Medford, Oklahoma	5.581	3.2	ml
2014-09-16T22:35:03.900Z	36.8204	-97.715	2km NE of Medford, Oklahoma	4.238	3.2	ml
2014-09-16T06:16:30.400Z	35.8204	-97.4227	6km S of Guthrie, Oklahoma	4.452	3	ml
2014-09-15T20:14:12.500Z	35.8203	-97.4257	6km S of Guthrie, Oklahoma	4.966	3.2	ml
2014-09-15T20:08:03.300Z	35.8141	-97.4275	7km S of Guthrie, Oklahoma	4.82	3.9	mwr
2014-09-15T13:27:40.100Z	36.6337	-97.9813	27km NNW of Enid, Oklahoma	4.009	3.1	ml
2014-09-15T09:21:22.400Z	36.8405	-98.2455	13km NE of Cherokee, Oklahoma	3.551	3.1	ml
2014-09-15T00:11:16.500Z	35.8164	-97.4177	6km S of Guthrie, Oklahoma	4.324	3.1	ml
2014-09-14T12:01:02.500Z	36.6289	-97.9818	27km NNW of Enid, Oklahoma	5	3.5	mwr
2014-09-14T04:10:05.100Z	36.1785	-97.2678	12km S of Perry, Oklahoma	5.267	3.3	ml
2014-09-13T20:01:07.600Z	36.1963	-97.4148	15km SW of Perry, Oklahoma	5	3	ml
2014-09-13T16:58:10.100Z	36.2223	-97.5547	25km WSW of Perry, Oklahoma	3.186	3.2	ml
2014-09-13T08:22:30.600Z	36.6233	-97.6933	20km S of Medford, Oklahoma	4.68	3.4	ml
2014-09-12T14:41:55.900Z	36.1839	-97.2705	11km S of Perry, Oklahoma	3.746	3.7	mwr
2014-09-10T00:11:42.700Z	36.9682	-97.7852	17km WSW of Caldwell, Kansas	7.509	3.3	ml
2014-09-09T19:49:28.000Z	36.1783	-96.9684	10km NE of Stillwater, Oklahoma	5.993	3	ml
2014-09-09T10:06:44.100Z	36.217	-97.3944	12km SW of Perry, Oklahoma	11.684	3	ml
2014-09-09T09:06:46.500Z	36.1976	-97.4119	15km SW of Perry, Oklahoma	5	3.4	mwr
2014-09-08T21:02:14.900Z	36.8539	-97.8867	14km WNW of Medford, Oklahoma	6.175	3.5	ml
2014-09-08T18:04:22.500Z	36.8141	-97.7236	1km NE of Medford, Oklahoma	3.021	3.6	ml
2014-09-08T16:21:34.000Z	36.821	-97.7216	1km NE of Medford, Oklahoma	5	3.9	mwr
2014-09-08T15:23:30.570Z	37.305	-97.6059	10km SSE of Conway Springs, Kansas	5.4	3.2	mb lg
2014-09-08T12:56:52.900Z	37.2625	-97.6346	14km S of Conway Springs, Kansas	5	3.4	mwr
2014-09-08T01:52:57.600Z	36.82	-97.7158	2km NE of Medford, Oklahoma	4.742	3.1	ml
2014-09-06T18:53:59.100Z	36.6357	-97.7	19km S of Medford, Oklahoma	5	3.4	mwr
2014-09-04T23:32:05.600Z	36.1983	-97.4191	15km SW of Perry, Oklahoma	5	3.3	mwr
2014-09-04T23:02:42.200Z	36.1973	-97.4039	14km SW of Perry, Oklahoma	3.702	3	ml
2014-09-04T11:41:20.400Z	36.5792	-97.6055	27km SSE of Medford, Oklahoma	5	3.4	ml
2014-09-02T08:05:10.300Z	36.5191	-98.4726	18km W of Helena, Oklahoma	4.12	3.4	ml
2014-09-02T04:58:06.600Z	36.7184	-97.9189	19km WSW of Medford, Oklahoma	13.438	3.3	ml
2014-09-01T18:31:06.300Z	36.7266	-97.9132	18km WSW of Medford, Oklahoma	5	3.2	ml
2014-09-01T17:36:12.600Z	36.9043	-97.7616	11km NNW of Medford, Oklahoma	5	3	ml
2014-09-01T11:46:49.200Z	36.1954	-97.4061	14km SW of Perry, Oklahoma	3.956	3	ml
2014-08-31T22:04:51.800Z	35.5875	-97.3212	3km NW of Jones, Oklahoma	5.289	3.1	ml
2014-08-31T18:49:01.400Z	35.5881	-97.3216	3km NW of Jones, Oklahoma	4.861	3.2	ml
2014-08-31T16:57:17.000Z	36.625	-97.9865	26km ENE of Helena, Oklahoma	4.917	3.4	ml
2014-08-31T07:20:19.800Z	36.6189	-97.9985	25km ENE of Helena, Oklahoma	5.217	3.4	mwr
2014-08-29T15:39:25.300Z	35.8189	-97.4313	6km S of Guthrie, Oklahoma	3.61	3.2	ml
2014-08-29T09:52:13.500Z	36.2212	-97.5554	25km WSW of Perry, Oklahoma	3.488	3	ml
2014-08-29T03:01:27.060Z	36.254	-97.4547	15km WSW of Perry, Oklahoma	4.74	3.1	mb lg
2014-08-27T15:44:24.800Z	36.0942	-97.2286	15km W of Stillwater, Oklahoma	4.814	3.2	ml
2014-08-27T10:36:00.060Z	35.94	-96.8084	6km SW of Cushing, Oklahoma	2.49	3	mb lg
2014-08-26T16:05:10.000Z	35.8168	-97.4346	6km S of Guthrie, Oklahoma	5	3.1	mwr
2014-08-25T21:41:07.300Z	36.1175	-97.3161	19km S of Perry, Oklahoma	5.084	3.3	ml
2014-08-25T00:10:05.040Z	37.3657	-98.1573	14km NW of Harper, Kansas	7.67	3	mb lg
2014-08-23T11:22:12.800Z	36.7201	-97.9197	19km WSW of Medford, Oklahoma	5	3.3	ml
2014-08-23T11:06:34.000Z	35.8135	-97.4358	7km S of Guthrie, Oklahoma	5.243	3	mwr
2014-08-22T19:23:10.600Z	36.8594	-98.2553	14km NE of Cherokee, Oklahoma	3.362	3.1	ml
2014-08-20T16:33:58.840Z	37.2456	-97.9612	7km SE of Harper, Kansas	6.7	3.1	mb lg
2014-08-20T12:38:06.200Z	35.8829	-97.2688	7km S of Langston, Oklahoma	5	3	ml
2014-08-20T12:27:40.200Z	36.8571	-97.8673	13km WNW of Medford, Oklahoma	5	3	ml
2014-08-20T11:31:59.300Z	35.886	-97.2634	6km S of Langston, Oklahoma	4.887	3.3	ml
2014-08-20T11:01:39.400Z	35.8832	-97.2625	6km S of Langston, Oklahoma	4.463	3.1	ml
2014-08-19T12:41:35.700Z	35.7727	-97.4677	12km SSW of Guthrie, Oklahoma	4.51	4.4	mwr
2014-08-18T19:14:24.300Z	36.6317	-98.188	12km NE of Helena, Oklahoma	5	3.4	ml
2014-08-18T02:50:09.200Z	35.372	-96.487	13km S of Boley, Oklahoma	5	3.5	mwr
2014-08-18T01:25:57.400Z	36.8395	-98.2541	13km NE of Cherokee, Oklahoma	3	3.7	mwr

Table 2-3 - Revision 0
Historical Earthquakes in Oklahoma
Greater than 3.0 Magnitude
(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2014-08-17T16:35:07.700Z	36.8527	-97.8712	13km WNW of Medford, Oklahoma	4.808	3.1	ml
2014-08-17T15:59:05.600Z	36.8584	-97.8714	13km WNW of Medford, Oklahoma	5	3.1	mwr
2014-08-17T06:31:10.300Z	36.8516	-97.8693	13km WNW of Medford, Oklahoma	5	3.2	mwr
2014-08-17T06:18:43.200Z	36.8605	-97.873	13km WNW of Medford, Oklahoma	5.009	3.4	mwr
2014-08-16T10:54:24.800Z	36.8611	-97.8714	13km WNW of Medford, Oklahoma	6.097	3.4	ml
2014-08-14T14:15:31.600Z	35.8614	-97.3225	9km ESE of Guthrie, Oklahoma	5.117	3.2	ml
2014-08-13T15:44:28.100Z	36.6268	-97.685	20km SSE of Medford, Oklahoma	5.645	3.3	ml
2014-08-12T12:34:19.100Z	36.044	-97.514	12km NE of Crescent, Oklahoma	5	3	ml
2014-08-10T22:29:04.280Z	36.2885	-97.1224	14km E of Perry, Oklahoma	5	3.3	ml
2014-08-10T14:54:27.280Z	36.859	-97.863	12km WNW of Medford, Oklahoma	5	3.3	ml
2014-08-08T20:58:40.100Z	35.8156	-97.4221	7km S of Guthrie, Oklahoma	3.815	3	ml
2014-08-08T20:45:37.800Z	35.8142	-97.4172	7km S of Guthrie, Oklahoma	4.161	3	ml
2014-08-08T20:21:56.800Z	35.8158	-97.4201	7km S of Guthrie, Oklahoma	3.897	3.3	mwr
2014-08-08T18:07:48.100Z	35.82	-97.429	6km S of Guthrie, Oklahoma	5	3.3	ml
2014-08-07T16:39:21.400Z	36.8175	-97.9961	23km W of Medford, Oklahoma	5.393	3.2	ml
2014-08-07T16:03:44.400Z	35.5776	-97.277	1km NE of Jones, Oklahoma	5.313	3	ml
2014-08-06T16:06:44.690Z	36.581	-97.606	27km SSE of Medford, Oklahoma	5	3	ml
2014-08-05T17:09:56.890Z	36.818	-97.989	22km W of Medford, Oklahoma	4.2	3.3	ml
2014-08-04T18:23:01.500Z	35.5977	-97.4066	8km SE of Edmond, Oklahoma	6.39	3.2	mwr
2014-08-04T15:30:42.760Z	35.815	-97.42	7km S of Guthrie, Oklahoma	3.7	3.3	mwr
2014-08-03T17:11:06.100Z	35.614	-96.9408	11km SSW of Chandler, Oklahoma	5.595	3.1	ml
2014-08-03T12:21:26.600Z	35.8178	-97.4241	6km S of Guthrie, Oklahoma	3.775	3	ml
2014-08-03T04:57:57.600Z	35.772	-97.477	12km SSW of Guthrie, Oklahoma	6.7	3.2	ml
2014-08-02T01:44:30.400Z	36.773	-98.069	25km E of Cherokee, Oklahoma	5.8	3.1	ml
2014-08-01T14:44:27.700Z	36.7621	-98.0439	27km E of Cherokee, Oklahoma	11.68	3.2	mwr
2014-08-01T14:19:21.100Z	36.7498	-98.0449	27km E of Cherokee, Oklahoma	4.6	3.1	mwr
2014-07-31T23:28:20.000Z	36.5823	-97.6107	27km SSE of Medford, Oklahoma	5.287	3.2	ml
2014-07-31T06:09:30.700Z	36.3006	-97.543	22km W of Perry, Oklahoma	4.996	3.2	ml
2014-07-30T23:48:03.300Z	35.7185	-97.432	8km NNE of Edmond, Oklahoma	5	3.2	ml
2014-07-30T16:46:59.080Z	35.718	-97.426	8km NNE of Edmond, Oklahoma	5	3.3	ml
2014-07-30T16:21:32.940Z	35.719	-97.427	8km NNE of Edmond, Oklahoma	5.1	3.3	mwr
2014-07-29T02:46:36.000Z	36.7561	-98.0453	27km E of Cherokee, Oklahoma	5.287	4.3	mwr
2014-07-28T22:26:50.800Z	36.7469	-98.408	4km W of Cherokee, Oklahoma	4.76	3.3	ml
2014-07-28T15:08:04.220Z	36.747	-98.406	4km W of Cherokee, Oklahoma	4.2	3	ml
2014-07-27T22:19:20.000Z	36.144	-96.809	10km WNW of Yale, Oklahoma	0.046	3.2	ml
2014-07-26T10:57:10.970Z	37.1081	-97.7961	18km WNW of Caldwell, Kansas	3.12	3.4	mb_lg
2014-07-25T04:56:51.600Z	36.662	-98.28	12km SSE of Cherokee, Oklahoma	0.7	3.4	mwr
2014-07-23T05:58:13.200Z	35.8779	-97.3059	8km SSW of Langston, Oklahoma	4.988	3.1	ml
2014-07-23T02:02:26.400Z	35.8782	-97.3091	8km SSW of Langston, Oklahoma	5.264	3.3	mwr
2014-07-20T12:24:58.230Z	37.3394	-98.0905	8km NW of Harper, Kansas	6.15	3.3	mb_lg
2014-07-20T00:24:58.390Z	37.2344	-97.9489	8km SE of Harper, Kansas	5.58	3	mb_lg
2014-07-18T13:41:13.000Z	36.675	-98.2098	15km SE of Cherokee, Oklahoma	5	3.3	ml
2014-07-18T01:37:28.000Z	36.121	-97.3193	18km S of Perry, Oklahoma	4.963	3	ml
2014-07-17T10:40:43.190Z	37.1223	-97.7918	19km WNW of Caldwell, Kansas	5	3.6	mb_lg
2014-07-15T10:47:53.900Z	36.7496	-97.7474	6km S of Medford, Oklahoma	4.844	3	ml
2014-07-15T09:08:40.900Z	35.5243	-97.1588	3km N of Harrah, Oklahoma	6.653	3.9	mwr
2014-07-15T07:19:17.300Z	35.524	-97.1543	3km NNE of Harrah, Oklahoma	6.546	3.5	mwr
2014-07-14T16:50:14.400Z	35.8721	-97.3092	9km SSW of Langston, Oklahoma	5.117	3.3	mwr
2014-07-14T07:15:51.100Z	36.713	-97.888	17km SW of Medford, Oklahoma	5	3.9	mwr
2014-07-13T14:51:02.200Z	35.8588	-97.3237	9km ESE of Guthrie, Oklahoma	4.825	3	ml
2014-07-12T17:34:27.600Z	35.858	-97.3253	9km ESE of Guthrie, Oklahoma	4.997	3.1	ml
2014-07-12T17:11:46.700Z	35.8637	-97.321	9km E of Guthrie, Oklahoma	4.047	4	mwr
2014-07-12T11:27:26.400Z	35.8628	-97.3124	10km E of Guthrie, Oklahoma	5	3.2	ml
2014-07-11T12:17:05.500Z	36.56	-97.8367	18km NNE of Enid, Oklahoma	6.398	3.4	ml
2014-07-09T02:10:04.440Z	37.1046	-97.7864	17km WNW of Caldwell, Kansas	3.43	3	mwr
2014-07-07T14:38:21.500Z	34.0713	-97.468	10km SSW of Wilson, Oklahoma	7.727	3.2	ml
2014-07-07T07:44:13.900Z	36.6773	-98.2108	15km ESE of Cherokee, Oklahoma	3.615	3.2	ml
2014-07-07T06:53:06.300Z	36.7575	-98.0487	27km E of Cherokee, Oklahoma	6.034	3	ml
2014-07-06T15:22:05.600Z	36.7273	-97.893	16km WSW of Medford, Oklahoma	5	3.1	ml
2014-07-06T04:10:46.100Z	36.7497	-97.7497	6km SSW of Medford, Oklahoma	4.821	3.3	ml
2014-07-06T01:44:18.700Z	36.2157	-97.5417	24km WSW of Perry, Oklahoma	4.925	3.3	ml
2014-07-04T20:48:01.900Z	36.7233	-97.9285	19km WSW of Medford, Oklahoma	5	3	ml
2014-07-04T04:55:09.700Z	36.894	-97.3706	12km NW of Blackwell, Oklahoma	7.049	3.2	ml

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(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
 Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2014-07-03T20:24:20.000Z	36.7602	-98.0515	27km E of Cherokee, Oklahoma	3.975	3	ml
2014-07-03T20:14:54.300Z	35.9358	-97.0745	5km SW of Perkins, Oklahoma	4.656	3.2	ml
2014-07-03T16:09:03.400Z	36.3842	-96.9309	12km WNW of Pawnee, Oklahoma	5	3	ml
2014-07-03T14:43:41.600Z	36.7556	-98.0476	27km E of Cherokee, Oklahoma	5	3.1	ml
2014-07-01T14:22:07.200Z	36.5831	-97.8189	21km NNE of Enid, Oklahoma	5	3.1	ml
2014-07-01T08:20:34.500Z	36.6507	-97.9586	26km SW of Medford, Oklahoma	5	3.2	ml
2014-07-01T07:42:52.800Z	35.8247	-97.0749	16km SSW of Perkins, Oklahoma	5.643	3	ml
2014-06-30T11:03:51.600Z	35.8858	-97.2658	6km S of Langston, Oklahoma	4.511	3.2	ml
2014-06-30T01:30:44.300Z	36.8531	-97.8543	11km WNW of Medford, Oklahoma	4.476	3	ml
2014-06-29T16:29:47.700Z	35.5958	-97.4041	8km NNW of Spencer, Oklahoma	5.501	3	ml
2014-06-28T06:08:44.700Z	36.6833	-98.2613	11km SE of Cherokee, Oklahoma	4.962	3	ml
2014-06-27T22:35:04.800Z	36.7186	-97.9033	18km WSW of Medford, Oklahoma	6.063	3.7	mwr
2014-06-27T20:18:34.700Z	36.5649	-97.8371	19km N of Enid, Oklahoma	5	3.1	ml
2014-06-27T15:09:02.800Z	35.8856	-97.3103	8km SW of Langston, Oklahoma	5	3.6	mwr
2014-06-27T12:36:57.600Z	35.8856	-97.3125	8km SW of Langston, Oklahoma	5.472	3.3	ml
2014-06-27T07:10:46.200Z	35.8839	-97.2608	6km S of Langston, Oklahoma	4.761	3.5	ml
2014-06-26T23:28:03.400Z	35.8863	-97.2626	6km S of Langston, Oklahoma	5	3.7	mwr
2014-06-26T14:02:50.200Z	36.8682	-97.6881	7km NNE of Medford, Oklahoma	1.593	3.2	mwr
2014-06-26T07:57:16.200Z	36.7578	-98.0499	27km E of Cherokee, Oklahoma	5.716	3	ml
2014-06-26T07:45:55.500Z	36.755	-98.0469	27km E of Cherokee, Oklahoma	5.768	3.2	ml
2014-06-26T06:13:30.100Z	35.7749	-97.4912	12km SSW of Guthrie, Oklahoma	6.166	3.3	mwr
2014-06-26T05:41:27.200Z	35.7674	-97.4762	12km N of Edmond, Oklahoma	6.414	3.1	ml
2014-06-26T05:38:57.100Z	35.7683	-97.4845	12km N of Edmond, Oklahoma	6.301	3.5	mwr
2014-06-26T05:26:44.900Z	35.7716	-97.491	13km N of Edmond, Oklahoma	6.584	3.6	mwr
2014-06-25T13:09:45.300Z	36.6384	-98.1073	17km NE of Helena, Oklahoma	5.716	3.3	ml
2014-06-24T17:38:10.300Z	36.871	-97.694	7km NNE of Medford, Oklahoma	5	3	ml
2014-06-24T16:57:30.700Z	36.884	-97.3773	12km NW of Blackwell, Oklahoma	6.14	3.2	ml
2014-06-24T14:15:56.400Z	36.5993	-97.6136	25km SSE of Medford, Oklahoma	5.574	3	ml
2014-06-23T13:44:59.400Z	36.8512	-97.856	11km WNW of Medford, Oklahoma	5.627	3.4	mwr
2014-06-23T09:48:01.000Z	36.8534	-97.8595	12km WNW of Medford, Oklahoma	6.102	3.3	ml
2014-06-23T07:42:06.100Z	35.7739	-97.4785	12km SSW of Guthrie, Oklahoma	5.386	3.2	ml
2014-06-21T01:57:14.000Z	36.7197	-97.8843	16km SW of Medford, Oklahoma	5	3	ml
2014-06-20T23:10:55.900Z	36.7256	-97.903	17km WSW of Medford, Oklahoma	5	3.9	mwr
2014-06-20T14:46:18.500Z	35.975	-97.1779	7km ENE of Langston, Oklahoma	6.489	3.3	mwr
2014-06-20T12:46:48.200Z	35.5994	-97.4093	8km SE of Edmond, Oklahoma	4.67	3.1	ml
2014-06-18T19:44:41.600Z	35.9756	-97.1794	7km ENE of Langston, Oklahoma	5.627	3.2	ml
2014-06-18T19:11:33.000Z	36.723	-97.9006	17km WSW of Medford, Oklahoma	4.583	3.6	ml
2014-06-18T18:42:26.100Z	35.9772	-97.1898	Oklahoma	5	3.2	ml
2014-06-18T17:44:40.100Z	36.721	-97.8958	17km WSW of Medford, Oklahoma	4.087	3	ml
2014-06-18T17:26:33.200Z	35.9774	-97.1813	7km ENE of Langston, Oklahoma	5	3.1	ml
2014-06-18T14:08:33.800Z	35.9758	-97.1758	7km ENE of Langston, Oklahoma	5.964	3.2	mwr
2014-06-18T10:53:02.400Z	35.5956	-97.3924	8km N of Spencer, Oklahoma	5	4.1	mwr
2014-06-18T10:30:18.700Z	35.5974	-97.4001	8km NNW of Spencer, Oklahoma	5.315	3	ml
2014-06-18T07:08:01.300Z	35.9772	-97.1835	7km ENE of Langston, Oklahoma	5.569	3.4	ml
2014-06-17T16:29:12.600Z	35.5908	-97.374	7km N of Spencer, Oklahoma	5.053	3	ml
2014-06-16T11:25:12.700Z	35.5866	-97.3804	7km N of Spencer, Oklahoma	6.536	3.3	ml
2014-06-16T10:47:35.600Z	35.5935	-97.3969	8km NNW of Spencer, Oklahoma	5	4.3	mwr
2014-06-16T10:31:07.400Z	35.5925	-97.4027	8km NNW of Spencer, Oklahoma	6.67	3.5	mwr
2014-06-15T17:33:01.600Z	36.8326	-97.6391	8km ENE of Medford, Oklahoma	1.891	3	ml
2014-06-15T13:51:25.900Z	36.8663	-97.8567	12km WNW of Medford, Oklahoma	5.259	3	ml
2014-06-14T22:55:07.900Z	36.6037	-97.6234	24km SSE of Medford, Oklahoma	5	3.3	ml
2014-06-11T09:42:29.600Z	36.9293	-97.6495	12km SSW of Caldwell, Kansas	9.121	3	ml
2014-06-10T15:13:51.000Z	35.7155	-97.4288	8km NNE of Edmond, Oklahoma	5.322	3.1	ml
2014-06-10T07:19:55.000Z	35.7168	-97.4282	8km NNE of Edmond, Oklahoma	5	3.1	ml
2014-06-02T23:08:02.900Z	35.7188	-97.4244	8km NNE of Edmond, Oklahoma	5.301	3.1	ml
2014-06-02T22:35:20.900Z	35.7182	-97.4267	8km NNE of Edmond, Oklahoma	5.262	3.2	ml
2014-06-02T17:38:54.700Z	35.4943	-97.2576	1km ESE of Choctaw, Oklahoma	5.97	3.2	ml
2014-06-01T19:54:18.300Z	35.5032	-97.2361	3km ENE of Choctaw, Oklahoma	5	3.6	mwr
2014-06-01T05:50:09.100Z	35.4185	-96.5057	8km SSW of Boley, Oklahoma	5	3.1	ml
2014-05-31T10:18:06.400Z	35.4929	-97.2515	1km ESE of Choctaw, Oklahoma	7.087	3.7	mwr
2014-05-30T22:44:56.700Z	36.4797	-97.9665	12km NW of Enid, Oklahoma	4.487	3.1	ml
2014-05-30T21:42:02.200Z	36.6009	-98.3799	11km WNW of Helena, Oklahoma	6.447	3.3	mwr
2014-05-30T14:32:16.100Z	36.8131	-97.7597	2km WNW of Medford, Oklahoma	3.187	3.4	ml

Table 2-3 - Revision 0
Historical Earthquakes in Oklahoma
Greater than 3.0 Magnitude
(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2014-05-25T09:10:34.900Z	36.7981	-97.6673	6km E of Medford, Oklahoma	5	3	ml
2014-05-22T02:46:10.300Z	35.7777	-97.4679	11km SSW of Guthrie, Oklahoma	5.755	3.5	mwr
2014-05-21T23:19:07.740Z	35.9048	-97.2834	5km SSW of Langston, Oklahoma	7.35	3	mb_lg
2014-05-20T13:59:28.200Z	35.4984	-97.2409	2km E of Choctaw, Oklahoma	6.884	3.1	ml
2014-05-20T07:30:18.800Z	35.4902	-97.2458	2km ESE of Choctaw, Oklahoma	7.482	3.4	mwr
2014-05-20T05:42:38.600Z	35.4815	-97.2476	2km SE of Choctaw, Oklahoma	7.552	3.3	ml
2014-05-20T03:58:31.900Z	35.4855	-97.2545	1km SE of Choctaw, Oklahoma	7.538	3.2	ml
2014-05-19T06:29:08.400Z	36.0915	-97.0687	2km SSW of Stillwater, Oklahoma	4.02	3	ml
2014-05-19T04:16:03.600Z	36.1096	-97.445	22km NE of Crescent, Oklahoma	6.299	3.2	ml
2014-05-18T18:53:47.000Z	36.5923	-97.7994	22km NNE of Enid, Oklahoma	5	3	ml
2014-05-18T08:29:25.800Z	35.808	-96.9371	12km NNW of Chandler, Oklahoma	5	3.2	ml
2014-05-17T20:54:31.400Z	36.0946	-97.0702	2km SSW of Stillwater, Oklahoma	2.555	3.2	ml
2014-05-17T10:47:05.300Z	36.2794	-97.2612	2km ESE of Perry, Oklahoma	5	3.1	ml
2014-05-16T20:00:00.700Z	36.161	-96.8595	15km WNW of Yale, Oklahoma	8.104	3.1	ml
2014-05-16T03:35:07.000Z	34.429	-96.3119	14km SW of Coalgate, Oklahoma	5	3	ml
2014-05-15T20:23:21.300Z	35.7762	-97.4786	12km SSW of Guthrie, Oklahoma	6.907	3.4	mwr
2014-05-15T00:28:52.700Z	36.7981	-97.6599	7km ESE of Medford, Oklahoma	3.415	3.3	ml
2014-05-14T16:06:26.300Z	36.8762	-97.6651	9km NE of Medford, Oklahoma	5	3.1	ml
2014-05-13T21:39:11.700Z	36.1386	-96.8939	15km E of Stillwater, Oklahoma	5	3.3	ml
2014-05-12T00:13:03.600Z	36.309	-96.6745	8km S of Pawnee, Oklahoma	5.42	3	ml
2014-05-11T19:29:34.500Z	36.9073	-97.6624	12km NNE of Medford, Oklahoma	5	3	ml
2014-05-11T07:50:50.400Z	36.5831	-97.6101	27km SSE of Medford, Oklahoma	5.834	3	ml
2014-05-09T18:52:47.000Z	36.5833	-97.618	26km SSE of Medford, Oklahoma	3.998	3.9	mwr
2014-05-08T20:40:32.800Z	36.5773	-97.6271	27km SSE of Medford, Oklahoma	5	3.5	mwr
2014-05-08T15:08:57.000Z	36.4531	-97.0432	24km WNW of Pawnee, Oklahoma	4.768	3	ml
2014-05-08T04:32:45.300Z	36.6307	-97.828	21km SSW of Medford, Oklahoma	5.017	3.2	ml
2014-05-07T18:57:02.700Z	36.3905	-97.1517	16km NE of Perry, Oklahoma	2.49	3.2	ml
2014-05-06T06:08:10.400Z	35.9039	-97.2645	4km S of Langston, Oklahoma	4.776	3.2	ml
2014-05-03T09:39:07.700Z	36.6039	-97.8367	23km N of Enid, Oklahoma	5	3.6	ml
2014-05-02T19:44:20.500Z	35.5903	-97.3994	7km NNW of Spencer, Oklahoma	5.534	3.2	mwr
2014-05-02T10:29:20.400Z	35.876	-97.2988	8km SSW of Langston, Oklahoma	6.351	3	ml
2014-05-02T05:46:03.200Z	36.0768	-97.5536	14km NNE of Crescent, Oklahoma	4.67	3.2	ml
2014-05-01T19:07:30.500Z	36.2757	-97.2521	3km ESE of Perry, Oklahoma	4.131	3.1	ml
2014-05-01T10:04:07.900Z	35.8112	-96.9361	13km NNW of Chandler, Oklahoma	4.433	3.4	mwr
2014-04-30T21:26:00.100Z	36.0656	-97.0474	5km S of Stillwater, Oklahoma	1.117	3.1	ml
2014-04-30T19:46:10.700Z	36.5971	-97.6807	23km SSE of Medford, Oklahoma	5.613	3.4	ml
2014-04-30T08:06:52.200Z	36.7764	-98.073	25km E of Cherokee, Oklahoma	4.476	3	ml
2014-04-30T07:48:08.600Z	36.6037	-97.8342	23km N of Enid, Oklahoma	6.092	3.1	ml
2014-04-28T02:26:40.600Z	36.1057	-97.0443	1km SE of Stillwater, Oklahoma	7.036	3.2	ml
2014-04-27T00:22:29.000Z	36.0752	-97.5579	14km NNE of Crescent, Oklahoma	4.633	3	ml
2014-04-25T23:54:44.800Z	36.1521	-97.2949	15km S of Perry, Oklahoma	3.073	3	ml
2014-04-25T07:38:49.600Z	36.5989	-97.8271	23km NNE of Enid, Oklahoma	6.478	3.2	ml
2014-04-24T17:46:19.000Z	36.7676	-98.715	6km SW of Alva, Oklahoma	5	3.2	ml
2014-04-23T15:35:33.300Z	36.7133	-98.5923	12km SSE of Alva, Oklahoma	7.962	3.1	ml
2014-04-22T09:57:07.000Z	35.5935	-97.3795	7km N of Spencer, Oklahoma	5.913	3.3	ml
2014-04-21T18:16:08.700Z	36.6033	-97.8421	23km N of Enid, Oklahoma	5.822	3.2	ml
2014-04-20T19:31:32.200Z	35.7724	-97.4718	12km SSW of Guthrie, Oklahoma	7.193	3.3	ml
2014-04-20T19:13:41.500Z	35.7717	-97.4829	12km SSW of Guthrie, Oklahoma	5.846	3	ml
2014-04-20T19:07:13.100Z	35.774	-97.4821	12km SSW of Guthrie, Oklahoma	6.717	3.7	mwr
2014-04-19T10:43:10.300Z	36.2777	-97.2517	3km ESE of Perry, Oklahoma	4.157	3.8	mwr
2014-04-17T11:50:07.600Z	36.6797	-98.217	14km ESE of Cherokee, Oklahoma	3.008	3.6	ml
2014-04-14T13:17:58.600Z	35.7751	-97.4839	12km SSW of Guthrie, Oklahoma	7.45	3.1	ml
2014-04-13T20:02:21.100Z	35.7712	-97.4831	13km N of Edmond, Oklahoma	5.896	3.5	ml
2014-04-13T17:00:15.500Z	35.7698	-97.4793	12km N of Edmond, Oklahoma	5.737	3.4	ml
2014-04-12T16:13:15.800Z	35.8899	-97.2681	6km S of Langston, Oklahoma	3.075	3.3	ml
2014-04-12T05:32:52.200Z	36.274	-97.2478	4km ESE of Perry, Oklahoma	5	3.6	mwr
2014-04-12T02:53:38.300Z	35.7673	-97.4814	12km N of Edmond, Oklahoma	5.251	3	ml
2014-04-11T05:17:50.900Z	35.8922	-97.2738	6km SSW of Langston, Oklahoma	5.105	3	ml
2014-04-10T18:18:44.100Z	36.2889	-96.9539	14km WSW of Pawnee, Oklahoma	8.621	3.1	ml
2014-04-10T18:00:48.000Z	36.2894	-96.952	14km WSW of Pawnee, Oklahoma	8.204	3.7	ml
2014-04-10T16:53:47.300Z	36.2888	-96.951	14km WSW of Pawnee, Oklahoma	7.988	3.1	ml
2014-04-10T08:20:41.400Z	35.7809	-97.4845	12km SSW of Guthrie, Oklahoma	5	3.5	ml
2014-04-10T08:19:43.700Z	35.7689	-97.4827	12km N of Edmond, Oklahoma	5.537	3.4	mwr

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Historical Earthquakes in Oklahoma
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Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2014-04-10T07:35:40.500Z	35.7772	-97.4827	12km SSW of Guthrie, Oklahoma	6.837	3.2	ml
2014-04-10T07:33:57.100Z	35.7745	-97.4826	12km SSW of Guthrie, Oklahoma	7.04	4	mwr
2014-04-10T04:48:14.200Z	36.3944	-97.1483	17km NE of Perry, Oklahoma	5.282	3.2	ml
2014-04-09T21:09:30.500Z	35.3745	-96.638	13km SSE of Prague, Oklahoma	6.033	3.2	ml
2014-04-09T17:27:50.400Z	35.7766	-97.483	12km SSW of Guthrie, Oklahoma	6.832	3	ml
2014-04-09T03:36:06.900Z	35.8937	-97.2926	6km SSW of Langston, Oklahoma	4.667	3.2	ml
2014-04-07T18:01:42.000Z	35.8927	-97.2932	6km SSW of Langston, Oklahoma	5.316	3.1	ml
2014-04-07T16:03:03.900Z	35.8913	-97.2752	6km SSW of Langston, Oklahoma	5.131	4.2	mwr
2014-04-07T05:59:34.800Z	36.2853	-96.9806	16km WSW of Pawnee, Oklahoma	4.134	3	ml
2014-04-07T03:25:34.000Z	36.8409	-98.2775	11km NE of Cherokee, Oklahoma	5	3.4	mwr
2014-04-07T01:01:03.200Z	35.8893	-97.2706	6km SSW of Langston, Oklahoma	5	3.1	ml
2014-04-06T14:58:54.900Z	35.8902	-97.2691	6km SSW of Langston, Oklahoma	5	3.8	mwr
2014-04-06T14:25:09.800Z	35.8928	-97.2676	5km S of Langston, Oklahoma	5	3	ml
2014-04-05T12:42:16.900Z	36.1312	-97.6308	20km N of Crescent, Oklahoma	2.174	3.8	mwr
2014-04-05T10:54:55.800Z	36.0788	-97.5462	14km NNE of Crescent, Oklahoma	3.877	3	ml
2014-04-04T18:54:18.800Z	35.8887	-97.2837	6km SSW of Langston, Oklahoma	5	3.1	mwr
2014-04-04T06:42:34.500Z	35.8949	-97.268	5km SSW of Langston, Oklahoma	4.176	3	ml
2014-04-04T03:15:41.800Z	35.8913	-97.2734	6km SSW of Langston, Oklahoma	5	3.1	ml
2014-04-04T02:23:47.700Z	35.8941	-97.2682	5km SSW of Langston, Oklahoma	5.22	3.5	ml
2014-04-03T20:58:39.500Z	36.6805	-98.2169	14km ESE of Cherokee, Oklahoma	5	3.1	ml
2014-04-03T20:33:11.900Z	36.4478	-97.0683	25km S of McCord, Oklahoma	5	3.1	ml
2014-04-03T16:56:50.500Z	35.8905	-97.2703	6km SSW of Langston, Oklahoma	4.797	3.3	ml
2014-04-02T07:10:02.200Z	35.495	-97.2503	1km E of Choctaw, Oklahoma	7.176	3	ml
2014-04-02T00:56:25.900Z	36.6221	-97.6348	22km SSE of Medford, Oklahoma	5	3.3	ml
2014-04-01T17:07:13.700Z	35.8842	-97.285	7km SSW of Langston, Oklahoma	5	3.2	ml
2014-04-01T07:07:43.220Z	35.8993	-97.2614	5km S of Langston, Oklahoma	6.38	3	mb_lg
2014-03-31T23:59:47.800Z	35.887	-97.2621	6km S of Langston, Oklahoma	5	3	ml
2014-03-31T17:17:59.470Z	35.794	-96.978	13km NW of Chandler, Oklahoma	3.4	3.2	ml
2014-03-30T14:09:59.400Z	36.1255	-97.6398	19km NNW of Crescent, Oklahoma	3.903	4.1	mwr
2014-03-30T12:49:42.000Z	36.13	-97.6359	20km N of Crescent, Oklahoma	5	3.4	ml
2014-03-30T08:42:36.400Z	36.1352	-97.6257	20km N of Crescent, Oklahoma	2.483	3.9	mwr
2014-03-30T08:10:31.800Z	36.1317	-97.628	20km N of Crescent, Oklahoma	2.277	3.3	mwr
2014-03-30T08:07:05.200Z	36.1371	-97.624	20km N of Crescent, Oklahoma	2.535	3.3	mwr
2014-03-30T06:59:28.400Z	36.125	-97.644	19km NNW of Crescent, Oklahoma	5	3.3	ml
2014-03-30T06:51:56.300Z	36.1309	-97.6291	20km N of Crescent, Oklahoma	4.831	4.2	mwr
2014-03-30T06:37:43.700Z	36.1288	-97.6404	19km NNW of Crescent, Oklahoma	4.656	3.3	ml
2014-03-30T05:49:29.400Z	35.4911	-97.2465	2km ESE of Choctaw, Oklahoma	7.509	3	ml
2014-03-30T03:55:33.500Z	36.1288	-97.6438	20km NNW of Crescent, Oklahoma	5	3.5	mwr
2014-03-30T03:08:30.800Z	35.4923	-97.2471	2km ESE of Choctaw, Oklahoma	7.403	3.4	mwr
2014-03-29T06:11:18.900Z	35.4906	-97.2415	2km ESE of Choctaw, Oklahoma	7.049	3.1	ml
2014-03-28T23:16:24.300Z	36.1673	-96.9819	8km NE of Stillwater, Oklahoma	6.983	3.2	ml
2014-03-28T17:56:11.200Z	36.1257	-97.6329	19km N of Crescent, Oklahoma	0.393	3.1	ml
2014-03-27T20:05:16.600Z	35.897	-97.286	6km SSW of Langston, Oklahoma	4.6	3.2	ml
2014-03-25T14:01:19.100Z	35.7427	-97.5558	12km NW of Edmond, Oklahoma	6.016	3	mwr
2014-03-24T23:32:46.700Z	35.7693	-96.6517	2km NNE of Stroud, Oklahoma	5.761	3	ml
2014-03-22T19:42:12.210Z	36.8124	-97.5915	12km E of Medford, Oklahoma	4.1	3.3	ml
2014-03-22T19:15:54.400Z	36.638	-97.661	19km SSE of Medford, Oklahoma	5	3	ml
2014-03-22T10:24:25.680Z	37.0752	-97.8436	18km ESE of Anthony, Kansas	6.54	3	mb_lg
2014-03-22T03:05:58.310Z	35.888	-97.299	7km SSW of Langston, Oklahoma	4.5	3.9	mwr
2014-03-22T03:02:35.480Z	35.888	-97.29	7km SSW of Langston, Oklahoma	4.5	3.1	ml
2014-03-22T03:01:32.160Z	35.892	-97.279	6km SSW of Langston, Oklahoma	5	3	ml
2014-03-22T02:30:33.900Z	35.896	-97.27	5km SSW of Langston, Oklahoma	4.5	3.1	ml
2014-03-21T17:30:16.730Z	37.0895	-97.8455	17km ESE of Anthony, Kansas	10.95	3	mb_lg
2014-03-21T09:05:46.100Z	36.0796	-97.5493	14km NNE of Crescent, Oklahoma	4.296	3	ml
2014-03-20T22:42:32.200Z	36.5675	-97.8247	19km NNE of Enid, Oklahoma	3.66	3.3	ml
2014-03-20T14:01:19.800Z	35.891	-97.275	6km SSW of Langston, Oklahoma	5	3.3	ml
2014-03-20T05:12:23.800Z	36.6376	-97.6716	19km SSE of Medford, Oklahoma	6.715	3.1	ml
2014-03-19T20:15:32.000Z	35.949	-96.918	10km ESE of Perkins, Oklahoma	1.6	3.4	mwr
2014-03-19T11:23:14.200Z	36.079	-97.5501	14km NNE of Crescent, Oklahoma	3.7	3.1	ml
2014-03-19T08:54:30.000Z	36.0765	-97.5495	14km NNE of Crescent, Oklahoma	4.258	3.1	ml
2014-03-19T08:28:31.130Z	36.6079	-97.652	23km SSE of Medford, Oklahoma	5	3.1	mb_lg
2014-03-17T23:38:19.100Z	36.0799	-97.5474	14km NNE of Crescent, Oklahoma	4.023	3	ml
2014-03-17T18:45:55.260Z	35.893	-97.275	6km SSW of Langston, Oklahoma	5.1	3.1	ml

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Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2014-03-17T08:13:38.040Z	35.496	-97.307	1km ENE of Nicoma Park, Oklahoma	7.01	3.4	ml
2014-03-16T08:46:20.180Z	37.1918	-97.8992	12km ENE of Anthony, Kansas	3.08	3.7	mwr
2014-03-15T19:27:05.160Z	36.632	-97.669	20km SSE of Medford, Oklahoma	5	3	ml
2014-03-14T02:22:14.440Z	36.02	-97.11	8km NW of Perkins, Oklahoma	4.4	3.1	ml
2014-03-12T19:35:26.460Z	37.1783	-97.8728	14km E of Anthony, Kansas	5	3.2	mb_lg
2014-03-12T09:50:25.100Z	37.1966	-97.8858	13km ENE of Anthony, Kansas	3.1	3.3	mb_lg
2014-03-11T12:55:27.710Z	35.89	-97.282	6km SSW of Langston, Oklahoma	4.89	3.4	mwr
2014-03-10T14:11:20.200Z	36.1251	-96.9075	13km E of Stillwater, Oklahoma	4.334	3.5	ml
2014-03-09T17:05:54.000Z	35.4919	-97.2474	2km ESE of Choctaw, Oklahoma	7.29	3	ml
2014-03-08T21:50:55.000Z	35.796	-96.976	13km NW of Chandler, Oklahoma	5	3.3	ml
2014-03-08T01:34:12.920Z	35.89	-97.281	6km SSW of Langston, Oklahoma	5	3.1	ml
2014-03-08T01:29:04.480Z	35.889	-97.284	6km SSW of Langston, Oklahoma	4.7	3	ml
2014-03-05T14:17:06.390Z	35.593	-97.383	7km N of Spencer, Oklahoma	6.4	3.3	mwr
2014-03-02T14:55:46.900Z	36.5442	-97.0499	14km S of McCord, Oklahoma	3	3	ml
2014-03-02T04:21:46.100Z	35.636	-97.041	14km ESE of Luther, Oklahoma	4.4	3.5	ml
2014-02-27T10:14:01.000Z	36.5438	-97.0616	15km S of McCord, Oklahoma	7.75	3.4	ml
2014-02-27T00:19:10.000Z	36.4476	-97.0735	25km S of McCord, Oklahoma	0.001	3.2	ml
2014-02-26T19:44:37.000Z	36.5906	-97.8097	22km NNE of Enid, Oklahoma	5	3	ml
2014-02-26T19:30:33.000Z	36.675	-97.693	15km SSE of Medford, Oklahoma	5	3.4	ml
2014-02-26T18:18:02.000Z	36.5865	-97.8125	21km NNE of Enid, Oklahoma	5.172	3	ml
2014-02-24T16:44:59.440Z	35.817	-96.943	13km NNW of Chandler, Oklahoma	4.3	3.2	ml
2014-02-24T00:11:32.520Z	36.171	-96.9786	9km NE of Stillwater, Oklahoma	5	3.1	ml
2014-02-23T09:15:41.110Z	36.036	-97.341	12km NW of Langston, Oklahoma	5	3.3	mwr
2014-02-23T07:23:32.700Z	36.0353	-97.3362	12km NW of Langston, Oklahoma	5	3	ml
2014-02-23T04:44:35.800Z	36.175	-96.981	9km NE of Stillwater, Oklahoma	5	3.2	ml
2014-02-23T03:11:38.800Z	36.103	-97.081	2km SW of Stillwater, Oklahoma	5	3	ml
2014-02-21T21:38:49.650Z	35.781	-97.4745	11km SSW of Guthrie, Oklahoma	5.17	3.1	ml
2014-02-21T14:26:12.000Z	36.8695	-97.8886	15km WNW of Medford, Oklahoma	5	3.2	ml
2014-02-19T16:44:56.980Z	35.777	-97.466	11km SSW of Guthrie, Oklahoma	6.1	3.1	ml
2014-02-18T12:16:44.020Z	35.77	-97.459	12km SSW of Guthrie, Oklahoma	5.14	3.2	ml
2014-02-18T11:53:51.140Z	35.777	-97.467	11km SSW of Guthrie, Oklahoma	5.03	3.4	ml
2014-02-17T14:19:13.770Z	35.775	-97.475	12km SSW of Guthrie, Oklahoma	4.4	3	ml
2014-02-17T12:57:39.000Z	35.772	-97.463	12km SSW of Guthrie, Oklahoma	5	3.1	ml
2014-02-17T05:02:11.780Z	35.777	-97.466	11km SSW of Guthrie, Oklahoma	5.39	3.2	ml
2014-02-17T04:54:59.000Z	35.776	-97.469	12km SSW of Guthrie, Oklahoma	7.4	3.8	mwr
2014-02-16T01:51:47.800Z	35.781	-97.477	11km SSW of Guthrie, Oklahoma	5	3.3	ml
2014-02-15T23:20:46.200Z	37.2918	-97.6446	10km S of Conway Springs, Kansas	5	3.1	mb_lg
2014-02-15T00:19:12.990Z	35.7818	-97.4807	11km SSW of Guthrie, Oklahoma	5	3.1	ml
2014-02-14T20:46:15.500Z	35.7756	-97.4693	12km SSW of Guthrie, Oklahoma	5	3	ml
2014-02-12T12:41:37.000Z	36.9963	-97.9271	19km SSE of Anthony, Kansas	10.42	3.4	ml
2014-02-11T08:49:21.400Z	36.1265	-97.2952	18km S of Perry, Oklahoma	7.78	3	ml
2014-02-11T03:19:54.040Z	36.8657	-97.7345	6km N of Medford, Oklahoma	5	3	ml
2014-02-10T23:37:39.000Z	35.8162	-96.9324	13km NNW of Chandler, Oklahoma	5	3.5	mwr
2014-02-09T02:16:02.000Z	35.893	-97.292	6km SSW of Langston, Oklahoma	5	4.1	mwr
2014-02-06T12:48:08.630Z	36.7464	-98.2949	5km E of Cherokee, Oklahoma	4.45	3.3	ml
2014-02-05T23:15:40.000Z	36.8361	-97.7503	3km NNW of Medford, Oklahoma	10.649	3.5	ml
2014-02-04T15:59:51.270Z	36.1286	-97.3101	17km S of Perry, Oklahoma	5	3	ml
2014-02-04T14:08:17.140Z	37.1428	-97.7874	20km NW of Caldwell, Kansas	5	3.3	mb_lg
2014-02-03T09:03:21.580Z	37.132	-97.7684	18km NW of Caldwell, Kansas	5	3.6	mwr
2014-02-01T09:08:02.300Z	35.9505	-96.9074	11km ESE of Perkins, Oklahoma	5	3.6	mwr
2014-01-31T15:52:56.570Z	36.6532	-98.2081	13km NNE of Helena, Oklahoma	8.82	3.1	ml
2014-01-30T04:50:30.580Z	35.947	-96.9153	11km ESE of Perkins, Oklahoma	5.77	3.2	ml
2014-01-29T02:24:06.740Z	35.943	-96.908	11km ESE of Perkins, Oklahoma	5	3.2	ml
2014-01-29T02:07:14.740Z	35.9446	-96.9111	11km ESE of Perkins, Oklahoma	5	3	ml
2014-01-28T15:05:01.590Z	35.6	-97.389	8km N of Spencer, Oklahoma	5.5	3	ml
2014-01-26T06:38:18.200Z	35.1097	-96.1792	15km SSE of Wetumka, Oklahoma	2.54	3.1	ml
2014-01-09T23:07:37.170Z	35.8184	-96.9338	13km NNW of Chandler, Oklahoma	2.66	3	ml
2014-01-09T03:26:53.060Z	35.5421	-96.773	10km NW of Prague, Oklahoma	3.21	3.8	ml
2014-01-04T23:33:32.000Z	36.129	-97.322	18km S of Perry, Oklahoma	5	3.7	mb_lg
2014-01-04T21:26:17.000Z	35.819	-96.94	14km NNW of Chandler, Oklahoma	5	3.2	mb_lg
2014-01-04T20:35:30.100Z	36.8398	-98.3576	9km N of Cherokee, Oklahoma	2.988	3.5	mb_lg
2014-01-04T05:27:24.900Z	35.557	-97.234	4km ESE of Jones, Oklahoma	5.1	3	ml
2014-01-02T17:20:26.850Z	36.127	-96.895	14km E of Stillwater, Oklahoma	4.4	3.2	ml

Table 2-3 - Revision 0
Historical Earthquakes in Oklahoma
Greater than 3.0 Magnitude
(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2014-01-02T13:19:32.000Z	36.1226	-97.3227	18km S of Perry, Oklahoma	5	3.1	ml
2013-12-29T08:14:36.500Z	35.8914	-97.2966	7km SSW of Langston, Oklahoma	5	3.7	mwr
2013-12-29T02:41:02.400Z	36.958	-97.67	9km SW of Caldwell, Kansas	5.2	3.6	mwr
2013-12-28T14:26:52.300Z	36.1404	-97.3219	16km S of Perry, Oklahoma	5	3.3	ml
2013-12-27T22:19:37.100Z	35.6835	-97.3826	9km ENE of Edmond, Oklahoma	3.553	3.1	ml
2013-12-25T10:30:37.600Z	35.6012	-97.3837	8km N of Spencer, Oklahoma	5.95	3	ml
2013-12-25T03:08:17.110Z	35.6818	-97.3931	8km ENE of Edmond, Oklahoma	5	3.7	mb lg
2013-12-22T16:28:29.190Z	36.469	-97.047	23km S of McCord, Oklahoma	5	3.2	ml
2013-12-17T13:23:39.640Z	35.4	-96.648	10km SSE of Prague, Oklahoma	3.3	3.4	ml
2013-12-16T15:09:53.900Z	37.1297	-97.7758	18km NW of Caldwell, Kansas	5	3.8	mwr
2013-12-08T06:27:32.980Z	35.6045	-97.3971	9km SE of Edmond, Oklahoma	6.18	3.3	ml
2013-12-07T23:58:18.670Z	35.6077	-97.399	8km SE of Edmond, Oklahoma	6.73	3.2	ml
2013-12-07T19:26:30.100Z	35.6089	-97.3975	8km SE of Edmond, Oklahoma	6.431	3	ml
2013-12-07T18:10:24.590Z	35.6073	-97.3863	9km ESE of Edmond, Oklahoma	8.44	4.5	mwr
2013-12-06T00:37:13.850Z	36.8747	-97.9889	23km WNW of Medford, Oklahoma	5	3.1	ml
2013-12-02T07:21:52.620Z	35.611	-97.378	9km N of Spencer, Oklahoma	9.01	3.1	ml
2013-12-02T07:10:54.510Z	35.611	-97.379	9km N of Spencer, Oklahoma	8.66	3.2	ml
2013-11-30T21:13:39.000Z	35.8934	-97.2957	6km SSW of Langston, Oklahoma	5	3	ml
2013-11-27T07:36:25.610Z	36.5849	-97.8446	21km N of Enid, Oklahoma	5.26	3	ml
2013-11-26T21:43:55.440Z	35.602	-97.378	8km N of Spencer, Oklahoma	6.6	3	ml
2013-11-22T14:33:58.500Z	36.1792	-96.9537	11km NE of Stillwater, Oklahoma	3.11	3.6	ml
2013-11-18T08:37:41.900Z	36.183	-96.958	11km NE of Stillwater, Oklahoma	5	3.2	ml
2013-11-15T00:17:32.160Z	35.5898	-97.3808	7km N of Spencer, Oklahoma	5.21	3	mb lg
2013-11-12T23:04:00.700Z	35.388	-96.656	11km SSE of Prague, Oklahoma	2.1	3.2	ml
2013-11-12T04:00:58.590Z	36.5875	-97.8382	21km N of Enid, Oklahoma	5.76	3.4	mb lg
2013-11-11T21:15:06.060Z	35.7156	-97.4383	7km NNE of Edmond, Oklahoma	5	3.3	ml
2013-11-11T11:07:08.600Z	35.721	-97.4311	8km NNE of Edmond, Oklahoma	5	3.2	ml
2013-11-10T23:25:00.270Z	35.722	-97.4302	8km NNE of Edmond, Oklahoma	5.03	3.5	ml
2013-11-08T05:52:59.400Z	35.5919	-97.3874	7km N of Spencer, Oklahoma	5	3.3	ml
2013-11-08T05:50:05.500Z	35.5911	-97.3809	7km N of Spencer, Oklahoma	5	3.3	ml
2013-11-05T08:32:48.270Z	35.5873	-97.4172	8km NNW of Spencer, Oklahoma	5	3.2	mb lg
2013-11-05T04:01:34.690Z	35.6038	-97.3715	8km N of Spencer, Oklahoma	5	3.8	mwr
2013-11-04T01:52:02.020Z	35.599	-97.3863	8km N of Spencer, Oklahoma	5.821	3.3	mb lg
2013-11-02T15:30:26.500Z	35.5948	-97.3899	8km N of Spencer, Oklahoma	5	3	ml
2013-11-02T14:19:01.700Z	35.611	-97.361	8km NW of Jones, Oklahoma	5	3.4	mwr
2013-11-02T12:04:14.300Z	35.598	-97.378	8km N of Spencer, Oklahoma	5.77	3.2	ml
2013-11-02T09:36:45.200Z	35.598	-97.367	8km N of Spencer, Oklahoma	5	3.5	mwr
2013-10-26T03:04:22.210Z	36.5133	-97.8752	13km N of Enid, Oklahoma	4.94	3	ml
2013-10-20T09:17:47.370Z	36.648	-97.829	19km SSW of Medford, Oklahoma	5	3.1	ml
2013-10-12T03:25:23.590Z	34.086	-96.579	16km NE of Kingston, Oklahoma	5	3	ml
2013-10-08T10:48:21.300Z	36.726	-98.006	25km WSW of Medford, Oklahoma	3.43	3.2	ml
2013-10-05T07:11:49.600Z	36.58	-97.8159	21km NNE of Enid, Oklahoma	5.12	3.3	ml
2013-10-02T00:38:52.210Z	36.594	-97.831	22km N of Enid, Oklahoma	4.2	3.5	ml
2013-10-01T23:28:41.950Z	36.593	-97.836	22km N of Enid, Oklahoma	5	3.1	ml
2013-10-01T19:26:15.460Z	36.592	-97.837	22km N of Enid, Oklahoma	5	3.2	ml
2013-09-26T05:17:12.100Z	35.5896	-97.3751	7km N of Spencer, Oklahoma	6.07	3.2	ml
2013-09-23T13:56:25.540Z	33.946	-97.161	4km WNW of Marietta, Oklahoma	5	3.4	ml
2013-09-23T11:40:40.000Z	33.9544	-97.1107	2km NNE of Marietta, Oklahoma	8.933	3.2	ml
2013-09-15T05:58:13.900Z	35.4085	-96.5427	10km SSW of Boley, Oklahoma	4.88	3.1	ml
2013-08-10T08:44:27.270Z	35.569	-97.289	0km NNW of Jones, Oklahoma	5.9	3.3	ml
2013-08-08T22:46:29.350Z	36.863	-97.994	24km WNW of Medford, Oklahoma	5	3.2	ml
2013-08-08T06:57:51.000Z	35.3482	-96.5676	16km NE of Seminole, Oklahoma	3.93	3.3	ml
2013-08-01T02:39:23.000Z	35.5179	-97.1282	4km NE of Harrah, Oklahoma	12.32	3	ml
2013-07-31T02:43:37.000Z	35.573	-97.302	1km WNW of Jones, Oklahoma	7	3	ml
2013-07-27T20:23:39.400Z	36.66	-97.387	7km WSW of Tonkawa, Oklahoma	5	3.3	ml
2013-07-24T11:52:05.000Z	35.373	-96.481	13km S of Boley, Oklahoma	8.6	3.5	ml
2013-07-01T09:11:38.000Z	36.636	-97.683	26km NE of Enid, Oklahoma	4	3.5	ml
2013-07-01T08:19:24.000Z	36.673	-97.668	19km NE of Enid, Oklahoma	7.9	3.2	ml
2013-06-30T02:55:58.000Z	34.097	-96.548	9km E of Madill, Oklahoma	5	3	ml
2013-06-27T00:38:03.020Z	35.474	-97.112	4km ESE of Harrah, Oklahoma	10.8	3.4	ml
2013-06-26T21:00:50.500Z	35.96	-96.907	11km E of Perkins, Oklahoma	5	3	ml
2013-06-24T23:07:49.490Z	34.47	-96.283	9km SW of Coalgate, Oklahoma	5	3.2	ml
2013-06-18T12:42:49.000Z	35.477	-97.115	8km NNE of McLoud, Oklahoma	13.5	3.2	ml

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Historical Earthquakes in Oklahoma
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(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
 Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2013-06-17T06:39:01.000Z	35.463	-97.116	4km NNW of McLoud, Oklahoma	7.4	3.3	ml
2013-06-16T22:35:04.000Z	35.566	-97.292	8km W of Luther, Oklahoma	6.1	3.2	ml
2013-06-16T18:06:17.590Z	35.568	-97.309	6km E of Jones, Oklahoma	7.1	3.6	ml
2013-06-16T11:49:50.900Z	35.408	-96.471	9km S of Boley, Oklahoma	3.6	3	ml
2013-06-16T08:08:37.500Z	35.565	-97.308	1km W of Jones, Oklahoma	7.2	3.1	ml
2013-06-10T22:24:31.000Z	35.466	-97.009	8km ENE of McLoud, Oklahoma	6.6	3.3	ml
2013-06-09T07:12:32.380Z	35.615	-97.262	5km NNE of Jones, Oklahoma	7.2	3.7	mblg
2013-06-07T06:52:28.500Z	35.01	-96.308	Oklahoma	16.7	3	ml
2013-05-27T07:58:20.400Z	34.075	-96.59	15km ENE of Kingston, Oklahoma	6.7	3.2	ml
2013-05-20T01:46:35.000Z	35.666	-97.105	8km E of Luther, Oklahoma	5.5	3.2	ml
2013-04-28T03:06:42.200Z	34.135	-96.808	13km ENE of Dickson, Oklahoma	5	3.5	ml
2013-04-27T20:14:27.200Z	35.656	-97.126	6km E of Luther, Oklahoma	6.6	3.4	ml
2013-04-25T04:58:39.590Z	35.667	-97.126	5km NE of Luther, Oklahoma	6.8	3	ml
2013-04-24T22:54:33.100Z	35.669	-97.112	8km ENE of Luther, Oklahoma	5.3	3	ml
2013-04-24T18:04:22.170Z	35.69	-97.089	10km ENE of Luther, Oklahoma	5	3.3	ml
2013-04-23T19:33:58.540Z	35.679	-97.104	8km ENE of Luther, Oklahoma	6.6	3.1	ml
2013-04-22T00:00:22.500Z	35.612	-97.258	6km NE of Jones, Oklahoma	5.5	3	ml
2013-04-17T16:51:01.800Z	35.686	-97.083	12km E of Luther, Oklahoma	6.8	3.2	ml
2013-04-17T16:25:39.240Z	35.685	-97.082	10km ENE of Luther, Oklahoma	7	3.2	ml
2013-04-17T14:56:16.300Z	35.659	-97.123	7km NE of Luther, Oklahoma	7.7	3.2	ml
2013-04-17T01:14:04.300Z	35.659	-97.125	5km ENE of Luther, Oklahoma	7.7	3.4	ml
2013-04-16T21:51:21.210Z	35.663	-97.12	6km E of Luther, Oklahoma	2.3	3.6	ml
2013-04-16T21:03:04.580Z	35.533	-96.764	8km NW of Prague, Oklahoma	5	3.3	ml
2013-04-16T17:09:01.720Z	35.679	-97.107	8km ENE of Luther, Oklahoma	2.5	3.3	ml
2013-04-16T17:07:19.550Z	35.673	-97.114	7km E of Luther, Oklahoma	2.3	3.7	ml
2013-04-16T16:47:50.940Z	35.668	-97.115	7km E of Luther, Oklahoma	6.9	3.3	ml
2013-04-16T16:44:05.000Z	35.671	-97.119	10km ESE of Luther, Oklahoma	7.1	3.5	ml
2013-04-16T10:20:27.790Z	35.684	-97.093	Oklahoma	6.5	3.3	ml
2013-04-16T10:16:53.000Z	35.681	-97.098	8km ENE of Luther, Oklahoma	7	4.2	mwr
2013-04-16T07:16:42.700Z	35.674	-97.106	8km E of Luther, Oklahoma	6.9	3.6	ml
2013-04-16T07:15:30.400Z	35.672	-97.108	8km E of Luther, Oklahoma	7	3	ml
2013-04-16T06:56:29.700Z	35.686	-97.089	12km ENE of Luther, Oklahoma	6.2	4.4	mwr
2013-03-21T16:34:35.000Z	35.467	-97.396	1km N of Midwest City, Oklahoma	5	3.2	ml
2013-03-21T15:56:41.680Z	35.492	-97.381	4km NNE of Midwest City, Oklahoma	10.5	3.3	ml
2013-03-16T19:39:12.000Z	35.521	-96.783	9km WNW of Prague, Oklahoma	5	3	ml
2013-03-11T17:32:18.490Z	35.417	-96.548	9km SSW of Boley, Oklahoma	5	3.2	mblg
2013-03-06T18:24:54.920Z	35.545	-96.719	10km NW of Prague, Oklahoma	5	3.4	mblg
2013-03-04T10:22:54.160Z	34.191	-96.681	6km SSE of Tishomingo, Oklahoma	5	3.5	mblg
2013-02-27T19:51:12.760Z	35.46	-97.335	3km SSW of Nicoma Park, Oklahoma	5	3.5	mblg
2013-01-16T20:51:43.000Z	35.592	-97.356	6km WNW of Jones, Oklahoma	5	3.2	ml
2013-01-16T06:26:35.270Z	35.619	-97.337	Oklahoma	5	3.2	mblg
2013-01-04T01:59:20.000Z	35.38	-96.515	Oklahoma	5	3.5	mwr
2012-12-16T16:46:07.000Z	36.128	-96.855	Oklahoma	5	3.1	ml
2012-12-12T18:37:00.000Z	35.37	-96.496	Oklahoma	5	3	ml
2012-12-12T03:30:15.000Z	35.532	-96.759	Oklahoma	5	3.1	ml
2012-11-17T04:48:58.000Z	36.661	-97.381	Oklahoma	5	3	ml
2012-10-28T04:00:34.000Z	35.422	-96.537	Oklahoma	3.3	3.3	ml
2012-10-21T10:44:15.000Z	35.653	-97.215	Oklahoma	5	3.4	ml
2012-10-17T04:42:40.000Z	35.67	-97.111	Oklahoma	5	3.2	mblg
2012-10-09T08:49:07.000Z	36.083	-97.386	Oklahoma	8.9	3.3	ml
2012-09-30T19:17:17.000Z	35.523	-96.779	Oklahoma	5	3	ml
2012-09-09T01:58:52.000Z	35.375	-96.537	Oklahoma	2.5	3.4	ml
2012-08-18T03:30:11.000Z	35.53	-96.777	Oklahoma	3.2	3.3	ml
2012-08-07T10:47:50.000Z	35.395	-96.587	Oklahoma	5	3	ml
2012-07-31T16:03:40.000Z	35.558	-96.754	Oklahoma	3	3.1	ml
2012-07-30T19:35:06.000Z	35.497	-96.824	Oklahoma	5	3.4	ml
2012-07-03T16:11:37.000Z	35.585	-97.331	Oklahoma	5	3.2	ml
2012-06-14T20:24:28.000Z	35.407	-97.434	Oklahoma City urban area, Oklahoma	1.9	3.1	ml
2012-06-13T22:44:32.000Z	35.46	-96.7	Oklahoma	3	3.1	ml
2012-06-13T06:21:36.590Z	35.552	-97.264	Oklahoma	5	3.3	mblg
2012-05-11T04:37:50.000Z	35.512	-96.788	Oklahoma	5	3.2	ml
2012-05-10T21:14:31.000Z	35.51	-96.781	Oklahoma	5	3.8	mwr
2012-04-30T17:14:01.000Z	35.53	-96.76	Oklahoma	5	3.2	ml

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Historical Earthquakes in Oklahoma
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(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
 Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2012-04-28T02:14:25.000Z	35.534	-96.748	Oklahoma	5	3.1	ml
2012-04-21T12:45:25.000Z	35.58	-97.07	Oklahoma	5	3.2	ml
2012-04-16T08:12:00.000Z	35.53	-96.759	Oklahoma	4.4	3.8	mwr
2012-04-14T07:35:58.000Z	34.944	-96.001	Oklahoma	5	3	ml
2012-04-12T12:10:04.000Z	35.523	-96.774	Oklahoma	5	3.1	mblg
2012-04-06T16:20:28.000Z	35.72	-97.159	Oklahoma	5	3.1	ml
2012-04-03T07:34:00.000Z	34.635	-95.875	Oklahoma	5	4.1	mb
2012-03-31T11:54:11.000Z	35.437	-96.574	Oklahoma	5	3.3	mblg
2012-03-10T10:11:42.000Z	35.446	-96.572	Oklahoma	0.9	3.1	ml
2012-02-29T22:20:42.000Z	35.725	-97.168	Oklahoma	4.9	3	mblg
2012-02-07T16:29:29.000Z	35.395	-96.524	Oklahoma	5	3.3	ml
2012-01-17T13:26:43.000Z	35.378	-96.546	Oklahoma	3.6	3	ml
2012-01-03T10:56:58.000Z	35.536	-96.75	Oklahoma	3.6	3.4	ml
2011-12-31T08:07:17.000Z	35.391	-96.52	Oklahoma	5	3.6	ml
2011-12-25T14:10:41.000Z	35.398	-96.53	Oklahoma	5	3.6	ml
2011-12-09T16:46:50.000Z	35.475	-96.855	Oklahoma	5	3	ml
2011-12-03T04:42:12.000Z	35.525	-96.768	Oklahoma	9.3	3.3	ml
2011-11-27T11:52:26.000Z	35.728	-97.166	Oklahoma	5	3.1	ml
2011-11-25T21:24:29.000Z	35.512	-96.746	Oklahoma	3.8	3.4	ml
2011-11-25T20:09:47.000Z	35.461	-96.881	Oklahoma	0.1	3.4	ml
2011-11-24T21:11:04.000Z	35.563	-96.788	Oklahoma	6.2	3.4	mwr
2011-11-21T21:46:09.000Z	35.503	-96.81	Oklahoma	5	3	ml
2011-11-18T07:41:08.000Z	35.541	-96.762	Oklahoma	7.4	3.3	ml
2011-11-16T17:10:52.000Z	35.505	-96.803	Oklahoma	5	3.2	ml
2011-11-14T05:31:42.000Z	35.521	-96.782	Oklahoma	3.1	3.2	ml
2011-11-13T09:49:12.000Z	35.457	-96.876	Oklahoma	4.8	3.2	ml
2011-11-12T01:41:03.000Z	35.532	-96.753	Oklahoma	6.2	3.2	ml
2011-11-12T01:18:43.000Z	35.545	-96.73	Oklahoma	3.9	3.1	ml
2011-11-11T19:19:16.000Z	35.537	-96.753	Oklahoma	3.6	3.2	ml
2011-11-10T08:36:38.000Z	35.487	-96.85	Oklahoma	3.3	3.2	md
2011-11-09T15:21:02.000Z	35.513	-97.39	Oklahoma City urban area, Oklahoma	3.1	3	md
2011-11-09T12:08:36.000Z	35.534	-96.761	Oklahoma	5	3.4	ml
2011-11-08T19:05:18.000Z	35.526	-96.77	Oklahoma	3	3.5	mwr
2011-11-08T03:05:07.000Z	35.52	-96.786	Oklahoma	5	3.1	ml
2011-11-08T02:46:57.000Z	35.531	-96.788	Oklahoma	5	4.8	mwr
2011-11-07T17:09:52.000Z	35.506	-96.798	Oklahoma	5	3.2	ml
2011-11-07T13:50:20.000Z	35.477	-96.856	Oklahoma	3.1	3.1	md
2011-11-07T08:12:35.000Z	35.512	-96.786	Oklahoma	3.1	3.1	md
2011-11-07T02:38:20.000Z	35.533	-96.75	Oklahoma	5	3.1	ml
2011-11-07T01:26:31.000Z	35.518	-96.786	Oklahoma	3.1	3.3	mblg
2011-11-07T01:17:13.000Z	35.522	-96.778	Oklahoma	4	3	md
2011-11-06T18:26:57.000Z	35.473	-96.869	Oklahoma	3.1	3.1	md
2011-11-06T17:52:35.000Z	35.494	-96.828	Oklahoma	3.1	3.4	mwr
2011-11-06T15:07:07.000Z	35.484	-96.856	Oklahoma	5	3.8	mwr
2011-11-06T11:03:52.000Z	35.496	-96.838	Oklahoma	5	3.1	ml
2011-11-06T10:52:35.000Z	35.537	-96.779	Oklahoma	3.1	3.6	mwr
2011-11-06T09:39:57.000Z	35.469	-96.865	Oklahoma	5	3.7	mwr
2011-11-06T09:22:04.000Z	35.485	-96.844	Oklahoma	5	3.5	ml
2011-11-06T08:14:13.000Z	35.525	-96.771	Oklahoma	5.6	3.1	ml
2011-11-06T08:04:56.270Z	35.585	-96.836	Oklahoma	5	3	mblg
2011-11-06T07:38:31.710Z	35.517	-96.834	Oklahoma	5	3.6	mblg
2011-11-06T07:32:41.000Z	35.48	-96.847	Oklahoma	5	3.2	ml
2011-11-06T06:31:11.000Z	35.479	-96.859	Oklahoma	5	3.7	mwr
2011-11-06T04:53:59.000Z	35.546	-96.749	Oklahoma	5	3.3	ml
2011-11-06T04:31:50.000Z	35.522	-96.776	Oklahoma	5	3.9	ml
2011-11-06T04:08:13.000Z	35.515	-96.789	Oklahoma	5	3	ml
2011-11-06T04:03:42.000Z	35.521	-96.771	Oklahoma	5	4	ml
2011-11-06T03:53:10.000Z	35.532	-96.765	Oklahoma	5.2	5.7	mww
2011-11-06T01:03:58.000Z	35.546	-96.749	Oklahoma	5	3	ml
2011-11-05T14:36:30.380Z	35.518	-96.778	Oklahoma	5	3.6	ml
2011-11-05T13:42:26.000Z	35.53	-96.766	Oklahoma	5	3.2	ml
2011-11-05T11:24:15.000Z	35.525	-96.773	Oklahoma	5	3.4	ml
2011-11-05T09:12:11.000Z	35.528	-96.766	Oklahoma	5	3.3	ml

Table 2-3 - Revision 0
Historical Earthquakes in Oklahoma
Greater than 3.0 Magnitude
(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
 Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2011-11-05T07:27:19.000Z	35.544	-96.765	Oklahoma	3.2	3.3	ml
2011-11-05T07:12:45.000Z	35.55	-96.764	Oklahoma	3.1	4.8	mwr
2011-10-28T09:18:46.000Z	35.525	-97.386	Oklahoma City urban area, Oklahoma	5	3.4	mblg
2011-10-28T06:24:57.000Z	35.518	-97.38	Oklahoma City urban area, Oklahoma	3.2	3.2	mblg
2011-10-05T10:40:27.000Z	35.504	-97.232	Oklahoma	3.8	3	ml
2011-09-12T15:35:28.000Z	35.629	-97.244	Oklahoma	3.4	3.3	ml
2011-09-06T00:19:06.000Z	35.466	-97.045	Oklahoma	5	3	ml
2011-08-31T19:58:25.000Z	35.498	-97.25	Oklahoma	3.1	3	ml
2011-08-18T16:50:52.000Z	34.881	-97.744	Oklahoma	5	3	ml
2011-08-01T01:20:07.000Z	35.522	-97.226	Oklahoma	5	3	ml
2011-03-31T05:41:30.000Z	35.439	-96.53	Oklahoma	1.1	3.2	mwr
2011-03-11T10:56:23.000Z	35.45	-97.087	Oklahoma	5	3.1	mblg
2011-01-15T10:51:30.000Z	35.509	-97.222	Oklahoma	3.4	3.4	mblg
2010-12-28T01:49:24.000Z	34.696	-95.893	Oklahoma	5	3.1	md
2010-12-24T10:49:07.000Z	34.69	-96.361	Oklahoma	5	3	md
2010-12-12T01:07:56.000Z	35.431	-96.981	Oklahoma	5	3.2	mwr
2010-11-28T13:46:26.000Z	35.619	-97.239	Oklahoma	3.4	3.3	md
2010-11-28T03:28:43.000Z	35.612	-97.242	Oklahoma	2.5	3.5	mblg
2010-11-28T03:26:47.000Z	35.654	-97.224	Oklahoma	5	3	mblg
2010-11-24T23:45:13.000Z	35.614	-97.24	Oklahoma	6.2	3.1	mblg
2010-11-24T22:48:30.000Z	35.612	-97.246	Oklahoma	5	3.9	mwr
2010-10-25T20:53:13.000Z	34.874	-97.741	Oklahoma	5	3.2	mblg
2010-10-13T14:06:30.000Z	35.192	-97.32	Oklahoma	13	4.4	mwc
2010-10-01T22:39:14.000Z	34.861	-96.029	Oklahoma	5	3.1	mblg
2010-09-25T12:19:26.000Z	34.109	-96.715	Oklahoma	5	3.3	mblg
2010-09-19T22:01:47.000Z	35.611	-97.246	Oklahoma	5	3.5	mwr
2010-09-16T21:41:34.000Z	35.609	-97.243	Oklahoma	4	3.3	mwr
2010-09-15T20:03:53.000Z	35.609	-97.242	Oklahoma	4.2	3.1	mblg
2010-09-04T16:22:09.000Z	35.611	-97.24	Oklahoma	3.3	3.3	mblg
2010-09-01T00:46:31.000Z	35.611	-97.235	Oklahoma	3.1	3.1	mblg
2010-08-02T09:52:19.000Z	35.559	-97.241	Oklahoma	3.2	3.4	mblg
2010-06-14T21:33:56.500Z	34.865	-97.676	Oklahoma	5	3.1	md
2010-05-07T12:44:57.000Z	35.528	-97.299	Oklahoma	5.2	3.4	mblg
2010-04-15T13:22:36.000Z	34.631	-96.268	Oklahoma	0.9	3.2	mblg
2010-04-15T00:49:51.360Z	34.705	-96.398	Oklahoma	5	3	mblg
2010-04-12T04:04:48.000Z	35.611	-97.122	Oklahoma	5	3	mblg
2010-04-08T12:42:43.000Z	35.523	-97.284	Oklahoma	0.4	3.4	mblg
2010-03-22T02:37:18.310Z	35.556	-96.75	Oklahoma	8	3.7	mwr
2010-03-13T09:02:44.410Z	35.387	-98.113	Oklahoma	5	3.1	mblg
2010-03-11T23:57:29.510Z	35.475	-98.123	Oklahoma	6.4	3.4	mblg
2010-03-11T10:54:25.000Z	35.401	-98.06	Oklahoma	5	3	md
2010-03-11T08:11:01.900Z	35.378	-98.046	Oklahoma	5	3	md
2010-03-10T06:04:35.610Z	35.599	-96.769	Oklahoma	5	3.1	mblg
2010-03-05T20:35:13.750Z	35.582	-96.784	Oklahoma	5	3.1	mblg
2010-02-27T22:22:27.310Z	35.553	-96.752	Oklahoma	5	4.1	mwr
2010-02-26T09:02:07.600Z	35.616	-97.064	Oklahoma	5.7	3.1	mblg
2010-02-19T16:12:48.820Z	35.668	-97.05	Oklahoma	5	3	mblg
2010-02-15T03:32:26.400Z	35.557	-97.298	Oklahoma	3.3	3	mwr
2010-02-13T05:30:55.780Z	35.53	-97.272	Oklahoma	8.1	3.2	mwr
2010-01-24T07:14:52.230Z	35.502	-97.245	Oklahoma	6	3.6	mwr
2010-01-17T13:33:43.710Z	35.553	-97.221	Oklahoma	5	3	mblg
2010-01-15T15:27:02.320Z	35.555	-97.249	Oklahoma	8	3.7	mwr
2010-01-15T15:18:26.350Z	35.576	-97.25	Oklahoma	8	3.8	mwr
2010-01-14T10:05:34.150Z	35.539	-97.238	Oklahoma	5	3.3	mblg
2009-12-20T05:05:21.340Z	35.554	-97.267	Oklahoma	5	3.1	mblg
2009-12-13T08:38:25.880Z	35.587	-97.285	Oklahoma	5	3.6	mblg
2009-12-12T11:34:05.450Z	35.556	-97.316	Oklahoma	5	3.1	mblg
2009-12-07T17:44:25.180Z	35.556	-97.25	Oklahoma	5	3.5	mblg
2009-11-29T01:36:58.630Z	35.563	-97.275	Oklahoma	5	3	mblg
2009-11-17T04:00:17.770Z	34.462	-97.532	Oklahoma	5	3.1	mblg
2009-11-16T11:12:37.140Z	35.482	-97.228	Oklahoma	5	3	mblg
2009-11-14T11:13:01.340Z	35.494	-97.204	Oklahoma	5	3.1	mblg
2009-10-23T03:56:29.730Z	35.804	-97.029	Oklahoma	5	3	mblg

Table 2-3 - Revision 0
Historical Earthquakes in Oklahoma
Greater than 3.0 Magnitude
(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
 Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
2009-08-28T02:09:06.000Z	35.565	-97.29	Oklahoma	5	3.5	mblg
2009-08-27T08:22:14.530Z	34.942	-96.618	Oklahoma	5	3.4	mblg
2009-07-22T02:25:59.800Z	35.742	-96.944	Oklahoma	5	3.3	mblg
2009-07-01T17:14:48.240Z	35.547	-97.169	Oklahoma	5	3.4	mblg
2009-06-26T21:23:13.750Z	36.361	-97.467	Oklahoma	5	3.7	mblg
2009-06-14T21:31:09.020Z	35.659	-96.85	Oklahoma	5	3.4	mblg
2009-03-08T13:06:39.940Z	35.446	-97.456	Oklahoma City urban area, Oklahoma	5	3.4	mblg
2009-02-25T04:14:15.330Z	34.735	-96.036	Oklahoma	5	3.3	mblg
2009-02-22T09:43:06.750Z	36.369	-98.087	Oklahoma	5	3.2	mblg
2009-02-03T10:23:10.010Z	34.589	-96.34	22km NW of Coalgate, Oklahoma	5	3.1	mblg
2009-01-28T11:19:09.470Z	35.163	-97.871	Oklahoma	5	3.4	mblg
2008-10-30T16:25:00.670Z	35.443	-97.118	Oklahoma	5	3.1	mblg
2008-10-14T03:07:28.030Z	35.766	-100.714	Texas Panhandle region	5	3.7	mwr
2008-10-12T12:08:15.770Z	35.621	-100.315	Texas Panhandle region	5	3	mblg
2008-06-09T22:59:47.120Z	35.346	-96.767	Oklahoma	5	3.1	md
2007-10-07T13:54:21.550Z	34.51	-100.146	Texas Panhandle region	5	3.1	mblg
2007-09-27T15:21:02.060Z	35.471	-100.108	Texas Panhandle region	5	3	mblg
2007-05-27T21:03:22.110Z	35.149	-95.976	Oklahoma	5	3.2	md
2006-10-06T22:13:16.780Z	34.122	-97.625	Oklahoma	5	3.5	mblg
2006-04-05T18:46:23.140Z	34.069	-97.314	Oklahoma	5	3	mblg
2006-03-15T08:30:25.860Z	35.091	-96.3	Oklahoma	5	3	md
2005-04-22T05:17:04.090Z	34.179	-95.192	Oklahoma	5	3	mblg
2004-11-22T23:42:13.450Z	34.864	-97.672	Oklahoma	5	3	mblg
2004-06-08T00:15:09.990Z	34.233	-97.254	Oklahoma	5	3.5	mblg
2002-10-20T02:18:13.000Z	34.274	-96.079	Oklahoma	5	3.4	mblg
2002-05-31T09:57:10.020Z	34.025	-97.619	Oklahoma	5	3.3	mblg
2002-02-08T16:07:13.600Z	34.727	-98.361	Oklahoma	5	3.8	mblg
2001-07-24T14:02:35.000Z	37.7	-97	Kansas	5	3	mblg
1999-10-25T23:19:58.370Z	36.846	-99.659	Oklahoma	26.1	3	mblg
1998-10-30T17:41:22.200Z	36.8	-97.6	Oklahoma	5	3.5	mblg
1998-07-07T18:44:44.460Z	34.719	-97.589	Oklahoma	5	3.2	mblg
1998-04-28T14:13:01.680Z	34.782	-98.416	Oklahoma	5	3.9	mb
1997-09-06T23:38:00.910Z	34.66	-96.435	Oklahoma	5	4.5	mblg
1997-02-15T09:08:55.460Z	34.973	-100.569	Texas Panhandle region	5	3.2	mblg
1997-02-12T23:53:10.770Z	34.947	-100.89	Texas Panhandle region	5	3	mblg
1996-11-23T10:54:18.500Z	35.04	-100.504	Texas Panhandle region	5	3	mblg
1995-09-15T00:31:33.260Z	36.87	-98.69	Oklahoma	5	4.1	mblg
1995-06-01T04:49:29.320Z	34.287	-96.732	Oklahoma	5	3	mblg
1995-04-05T05:31:16.230Z	35.2	-99.028	Oklahoma	5	3	mblg
1995-01-18T15:51:39.420Z	34.774	-97.596	Oklahoma	5	4.2	mblg
1994-04-29T03:28:58.680Z	36.25	-98.09	Oklahoma	5	3	mblg
1993-01-14T17:06:10.450Z	36.595	-98.275	Oklahoma	5	3.1	mblg
1992-12-17T07:18:04.270Z	34.744	-97.581	Oklahoma	5	3.6	mblg
1991-01-24T05:00:26.900Z	36.378	-97.3	Oklahoma	5	3	mblg
1990-11-15T11:44:41.400Z	34.76	-97.59	Oklahoma	5	3.9	mblg
1989-07-20T06:07:50.420Z	36.434	-98.876	Oklahoma	5	3.1	mblg
1987-12-08T01:42:40.300Z	36.055	-98.024	Oklahoma	5	3.7	mblg
1987-01-24T16:08:17.000Z	35.828	-98.097	Oklahoma	5	3.1	mblg
1985-09-18T15:54:04.640Z	33.548	-97.051	central Texas	5	3.3	mblg
1984-02-03T04:38:27.110Z	34.657	-97.394	Oklahoma	5	3.2	mblg
1982-05-03T07:54:50.000Z	34.07	-96.38	Oklahoma	5	3	mblg
1981-07-11T21:09:22.540Z	34.884	-97.677	Oklahoma	5	3.5	mblg
1980-11-02T10:00:49.300Z	35.472	-97.777	Oklahoma	8	3	
1980-06-09T22:37:09.900Z	35.513	-101.082	Texas Panhandle region	5	3.4	
1979-09-13T00:49:19.800Z	35.219	-99.518	Oklahoma	5	3.4	
1979-06-07T07:39:35.600Z	35.187	-99.812	Oklahoma	5	3	
1976-04-19T04:42:42.200Z	36.134	-99.841	Oklahoma	5	3.5	
1976-04-16T18:59:44.200Z	36.107	-99.875	Oklahoma	5	3.4	
1975-11-29T14:29:40.900Z	34.521	-97.347	Oklahoma	5	3.5	lg
1975-10-12T02:58:11.200Z	34.816	-97.406	Oklahoma	20	3.2	lg
1975-09-13T01:25:02.800Z	34.139	-97.369	Oklahoma	5	3.4	lg
1974-02-15T13:33:49.200Z	36.5	-100.693	Oklahoma	24	4.5	mb

Table 2-3 - Revision 0
Historical Earthquakes in Oklahoma
Greater than 3.0 Magnitude
(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
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Notes:

Km - kilometers

Source: USGS Earthquake Hazards Program

<https://earthquake.usgs.gov/earthquakes/map>

Table 2-3 - Revision 0
Historical Earthquakes in Oklahoma
Greater than 3.0 Magnitude
(As of February 9, 2021)

Preparer: D. Horne; Date: 02/15/21
Reviewer: E. Dulle; Date: 09/09/22

Date and Time	Latitude	Longitude	Epicenter	Depth (km)	Magnitude	Mag. Type ¹
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¹ **Magnitude Type** = The method or algorithm used to calculate the preferred magnitude for the event. See table below.

Magnitude Type	Magnitude Range	Distance Range	Comments
Duration (Md or md)	< 4	0 - 400 km	Based on the duration of shaking as measured by the time decay of the amplitude of the seismogram. Often used to compute magnitude from seismograms with "clipped" waveforms due to limited dynamic recording range of analog instrumentation, which makes it impossible to measure peak amplitudes.
Local (ML MI, or ml)	2 - 7.5	0 - 600 km	The original magnitude relationship defined by Richter and Gutenberg for local earthquakes in 1935. It is based on the maximum amplitude of a seismogram recorded on a Wood-Anderson torsion seismograph. Although these instruments are no longer widely in use, ML values are calculated using modern instrumentation with appropriate adjustments.
Short-period surface wave (mb_Lg, mb_lg, or MLg)	3.5 - 7	150 - 1100 km	A magnitude for regional earthquakes based on the amplitude of the Lg surface waves as recorded on short-period instruments.
Short-period body wave (mb)	4 - 7	15 - 100 degrees	Based on the amplitude of P body-waves as recorded on short-period instruments that are most sensitive to waves with a period of about 1 s.
Twenty-second surface wave (Ms or Ms_20)	5 - 8.5	20 - 160 degrees	A magnitude for distant earthquakes based on the amplitude of Rayleigh surface waves measured at a period near 20 sec.
Moment (generic notation Mw or mw. Specific types denoted Mwb or mwb, Mwc or mwc, Mwr or mwr, and Mww or mww)	> 3.5	all	Based on the scalar seismic-moment of the earthquake, as determined by a moment-tensor inversion. Mwb – Mw based on moment tensor inversion of long-period (~10 - 100 s) body-waves (P- and SH). Mwc -- Moment magnitude derived from a centroid moment tensor inversion of intermediate- and long-period body- and surface-waves. Mwr -- Moment magnitude derived from a moment tensor inversion of complete waveforms at regional distances (less than ~13 degrees). Sometimes called RMT. Mww -- Moment magnitude derived from a centroid moment tensor inversion of the W-phase.
Moment (Mi or Mwp)	5 - 8	all	Based on an estimate of moment calculated from the integral of the displacement of the P wave recorded on broadband instruments.
Energy (Me)	> 3.5	all	Based on the seismic energy radiated by the earthquake as estimated by integration of digital waveforms

Table 2-4 - Revision 0
Monitor Well Inventory - 02W Wells

Preparer: A. Anstaett; Date: 02/23/21
 Reviewer: E. Dulle; Date: 09/09/22

Well	Site Area	Formation	Date Installed	Screened Interval (BGS)		TD BGS (ft.)	TOC Elev (ft. AMSL)
				Top	Bottom		
02W01	BA#1	Transition Zone	7/15/2002	8.2	17.7	20	943.73
02W02	BA#1	Transition Zone	7/15/2002	7.7	17.2	20	941.35
02W03	BA#1	Alluvium by Escarpment	7/15/2002	5.2	14.7	17	940.22
02W04	BA#1	Alluvium by Escarpment	7/16/2002	6.2	15.7	18	939.27
02W05	BA#1	Alluvium w/ clays	7/16/2002	6.2	15.7	19	938.62
02W06	BA#1	Alluvium	7/17/2002	6.9	21.2	24	938.67
02W07	BA#1	Alluvium	7/17/2002	7.5	21.7	25	939.14
02W08	BA#1	Alluvium	7/17/2002	8.9	23.2	26	939.45
02W09	BA#1	Transition Zone	7/18/2002	7.9	22.2	25	948.44
02W10	BA#1	Transition Zone	7/18/2002	5.9	20.2	23	944.49
02W11	BA#1	Alluvium	7/18/2002	5.7	25.2	28	940.04
02W12	BA#1	Alluvium w/ clays	7/19/2002	5.4	24.9	26	940.21
02W13	BA#1	Transition Zone	7/19/2002	9.5	23.7	26	939.52
02W14	BA#1	Alluvium	7/19/2002	6.2	25.7	29	939.96
02W15	BA#1	Alluvium by Escarpment	7/22/2002	7.9	12.7	15	938.50
02W16	BA#1	Alluvium	7/22/2002	7.2	16.7	20	937.83
02W17	BA#1	Alluvium	7/22/2002	8.5	22.7	25	939.01
02W18	BA#1	Alluvium	7/23/2002	6.2	25.7	29	939.26
02W19	BA#1	Alluvium	7/23/2002	8.3	22.5	25	939.44
02W20	BA#1	Transition Zone by Escarpment	7/23/2002	8.5	22.7	26	950.81
02W21	BA#1	Alluvium	7/25/2002	10.5	24.7	27	939.19
02W22	BA#1	Alluvium	7/26/2002	6.2	16.2	19	937.73
02W23	BA#1	Alluvium	7/26/2002	7.9	22.2	25	937.86
02W24	BA#1	Alluvium	7/26/2002	5.2	24.7	28	939.24
02W25	BA#1	Sandstone B	7/29/2002	11.5	31.0	32	957.38
02W26	BA#1	Transition Zone	7/29/2002	9.9	24.2	28	951.85
02W27	BA#1	Sandstone B	7/30/2002	10.2	19.7	22	944.97

Table 2-4 - Revision 0
Monitor Well Inventory - 02W Wells

Preparer: A. Anstaett; Date: 02/23/21
 Reviewer: E. Dulle; Date: 09/09/22

Well	Site Area	Formation	Date Installed	Screened Interval (BGS)		TD BGS (ft.)	TOC Elev (ft. AMSL)
				Top	Bottom		
02W28	BA#1	Transition Zone	7/30/2002	11.5	23.0	26	946.41
02W30	BA#1	Sandstone B	7/31/2002	10.2	22.7	25	946.64
02W32	BA#1	Alluvium w/ clays	7/31/2002	6.4	20.7	24	939.70
02W33	BA#1	Alluvium by Escarpment	8/1/2002	5.2	14.7	17	937.87
02W34	BA#1	Alluvium	8/1/2002	5.2	24.7	28	938.59
02W35	BA#1	Alluvium	8/1/2002	6.2	25.7	29	938.45
02W36	BA#1	Alluvium	8/2/2002	5.2	24.7	27	938.68
02W37	BA#1	Alluvium	8/2/2002	5.2	24.7	27	938.87
02W38	BA#1	Alluvium	8/2/2002	5.7	26.2	26	940.08
02W39	BA#1	Transition Zone by Escarpment	8/2/2002	7.5	21.7	25	950.14
02W40	BA#1	Sandstone B	8/5/2002	15.5	29.7	32	954.62
02W41	BA#1	Sandstone B	8/5/2002	13.1	27.3	31	953.50
02W42	BA#1	Sandstone B	8/5/2002	7.2	27.7	31	951.21
02W43	BA#1	Alluvium	8/6/2002	8.2	27.2	30	939.06
02W44	BA#1	Alluvium	8/6/2002	6.7	26.2	29	939.00
02W45	BA#1	Alluvium	8/6/2002	8.2	27.7	31	939.22
02W47	BA#1	Sandstone B	8/7/2002	10.2	29.7	32	957.14
02W48	BA#1	Sandstone C	9/25/2002	34.6	54.5	60	938.99
02W50	BA#1	Sandstone B	8/8/2002	13.2	32.7	36	961.14
02W51	BA#1	Sandstone B	8/9/2002	9.2	33.7	37	962.18
02W52	BA#1	Sandstone B	8/12/2002	13.7	33.5	37	960.86
02W53	BA#1	Sandstone B	8/16/2002	5.2	19.7	23	943.76
02W62	BA#1	Alluvium	9/25/2002	5.5	25.0	28	938.53

Table 2-5 - Revision 0
Monitor Well Inventory - 1300 Series Wells

Preparer: A. Anstaett; Date: 02/23/21
 Reviewer: E. Dulle; Date: 09/09/22

Well	Site Area	Formation	Date Installed	Screened Interval (BGS)		TD BGS	TOC Elev
				Top	Bottom	(ft.)	(ft. AMSL)
1311	SW of U-Pond 1	Sandstone A	2/21/1985	25.00	40.00	42.70	996.10
1312	W of U-Pond 1	Sandstone A	2/21/1985	21.00	36.00	39.20	992.66
1313	N of U-Pond 1	Sandstone A	2/25/1985	23.00	38.00	38.00	995.09
1314	S of BA #1 Trenches	Sandstone B	2/13/1985	30.00	45.00	50.00	972.01
1315R	N of BA#1 Trenches	Sandstone B	7/25/2002	10.50	24.70	25.00	949.05
1316R	NW of BA#1 Trenches	Sandstone B	7/30/2002	10.20	24.70	25.00	946.45
1319B-1	E of U Building	Sandstone B	3/25/2003	65.00	79.50	80.00	1009.65
1319B-3	E of U Building	Sandstone B	4/1/2003	65.00	79.50	80.00	1011.22
1319B-4	E of U Building	Sandstone B	7/19/2003	65.00	79.50	80.00	1009.46
1320	W of U-Pond #2	Sandstone A	1/20/1989	28.50	38.50	41.30	1001.74
1321	W of U-Pond #2	Sandstone C	1/25/1989	111.50	121.60	124.40	1001.73
1324	E of BA #4	Sandstone A	2/8/1989	25.00	35.00	35.00	997.63
1331	NW of BA #2	Sandstone A	3/11/1989	12.20	22.20	25.00	978.34
1335A	W of BA #4	Sandstone A	5/21/1996			43.40	998.70
1336A	N of U-Pond #2	Sandstone A	5/18/1994	18.00	28.00	31.00	988.29
1337	NE of U-Pond #2	Sandstone A	2/12/1997	24.00	34.00	34.50	994.45
1338	NE of U-Pond #2	Sandstone B	2/12/1997	49.00	59.00	59.50	994.24
1340	NE of U-Pond #1	Sandstone A	2/16/1997	20.00	30.00	30.50	984.83
1341	NE of U-Pond #1	Sandstone B	2/16/1997	50.00	60.00	60.50	984.78
1343	Center near River	Alluvium	9/29/1997	8.50	23.50	24.50	941.58
1344	East near River	Alluvium	9/29/1997	8.30	23.30	24.30	937.90
1345	N of U-Pond #1	Sandstone B	4/8/2003	45.00	59.50	60.00	988.97
1346	N of U-Pond #2	Sandstone B	4/9/2003	45.00	59.50	60.00	991.50
1347	N of U-Pond #2	Sandstone A	4/9/2003	24.50	39.50	40.00	996.33
1348	S of 1206 Drainage	Sandstone A	4/10/2003	15.00	34.50	35.00	999.54
1350	E of 1206 Drainage	Sandstone A	4/11/2003	10.00	19.50	20.00	992.91
1351	E of 1206 Drainage	Sandstone A	4/11/2003	5.00	14.50	15.00	982.44

Table 2-5 - Revision 0
Monitor Well Inventory - 1300 Series Wells

Preparer: A. Anstaett; Date: 02/23/21
 Reviewer: E. Dulle; Date: 09/09/22

Well	Site Area	Formation	Date Installed	Screened Interval (BGS)		TD BGS (ft.)	TOC Elev (ft. AMSL)
				Top	Bottom		
1352	E of 1206 Drainage	Sandstone A	4/11/2003	12.00	21.50	22.00	985.60
1354	E of 1206 Drainage	Sandstone A	7/8/2003	15.50	30.50	30.50	989.34
1355	E of 1206 Drainage	Sandstone A	7/8/2003	23.50	38.00	38.50	995.92
1356	E of 1206 Drainage	Sandstone A	7/7/2003	10.00	19.50	20.00	985.21
1357	E of 1206 Drainage	Sandstone A	7/22/2003	12.25	26.75	27.25	990.53
1358	E of 1206 Drainage	Sandstone A	7/22/2003	9.00	23.50	24.00	989.60
1359	E of 1206 Drainage	Sandstone A	10/16/2003	7.00	17.00	17.00	984.05
1360	E of 1206 Drainage	Sandstone A	10/16/2003	8.00	18.00	18.40	985.20
1361	North of BA #1	Alluvium	9/27/2012	7.00	29.50	29.50	940.28
1362	North of BA #1	Alluvium	5/14/2013	7.50	27.50	27.90	939.95
1363	North of BA #1	Alluvium	5/13/2013	3.40	28.40	28.90	939.72
1364	North of BA #1	Alluvium	5/13/2013	7.20	27.20	27.70	939.47
1365	North of BA #1	Alluvium	5/13/2013	8.30	28.30	28.80	939.66
1366	North of BA #1	Alluvium	5/13/2013	3.00	28.00	28.50	940.30
1367	North of BA #1	Alluvium	12/9/2014	7.85	27.85	28.35	939.26
1368	North of BA #1	Alluvium	12/9/2014	9.00	29.00	30.50	940.15
1369	North of BA #1	Alluvium	12/10/2014	10.00	30.00	30.50	939.98
1370	North of BA #1	Alluvium	12/10/2014	6.75	26.75	28.50	939.20
1371	North of BA #1	Alluvium	12/9/2014	10.50	25.50	26.00	935.32
1372	North of BA #1	Alluvium	12/9/2014	5.70	25.70	27.50	937.52
1373	North of BA #1	Alluvium	12/9/2014	9.00	24.00	24.50	935.52
1377	NE of BA #2	Sandstone A	11/7/2014	16.72	26.72	30.00	988.71
1378	NNE of BA #2	Sandstone A	11/7/2014	9.25	19.25	23.00	979.24
1379	N of BA #2	Sandstone A	11/7/2014	9.97	19.97	22.00	981.16
1381	W of U-Pond #2	Sandstone A	10/28/2014	20.73	30.73	31.50	997.25
1382	W of U-Pond #2	Sandstone B	10/28/2014	54.35	67.60	65.00	997.40
1383	E of U-Pond #2	Sandstone A	10/29/2014	36.20	46.20	49.00	1002.26

Table 2-5 - Revision 0
Monitor Well Inventory - 1300 Series Wells

Preparer: A. Anstaett; Date: 02/23/21
 Reviewer: E. Dulle; Date: 09/09/22

Well	Site Area	Formation	Date Installed	Screened Interval (BGS)		TD BGS (ft.)	TOC Elev (ft. AMSL)
				Top	Bottom		
1384	E of U-Pond #2	Sandstone B	10/29/2014	54.97	64.97	68.00	1002.07
1385	N of U-Pond #2	Sandstone A	10/31/2014	26.82	36.82	40.00	993.89
1386	N of U-Pond #2	Sandstone B	10/30/2014	50.70	65.70	70.00	993.83
1387	NE of U-Pond #2	Sandstone A	11/3/2014	9.45	19.45	22.00	981.48
1388	NE of U-Pond #2	Sandstone B	11/3/2014	31.83	46.83	50.00	981.11
1389	NE of U-Pond #2	Sandstone A	10/31/2014	19.45	29.45	33.00	987.94
1390	NE of U-Pond #2	Sandstone B	10/31/2014	41.06	56.56	60.00	987.84
1391	E of U-Pond #2	Sandstone B	11/3/2014	29.51	44.51	47.00	973.69
1392	Near 1336A	Sandstone B	10/29/2014	54.25	64.25	69.00	987.43
1393	Near 1346	Sandstone A	10/29/2014	25.90	35.90	39.00	992.48
1394	Near 1347	Sandstone B	10/30/2014	52.25	67.25	70.00	997.21
1395	W of UP1	Sandstone A	11/18/2017	12.1	27.1	27.5	986.25
1396	N of UP1	Sandstone A	11/18/2017	9.5	24.5	24.9	987.17
1397	NNE of UP1	Sandstone A	11/19/2017	9.6	24.6	25.0	982.33
1398	E of UP1	Sandstone A	11/19/2017	7.6	27.6	28.0	984.95
1399	SW of UP1	Sandstone A	11/18/2017	17.1	32.1	32.5	989.91

Table 2-6 - Revision 0
Monitor Well Inventory - 1400 Series Wells

Preparer: A. Anstaett; Date: 02/23/21
 Reviewer: E. Dulle; Date: 09/09/22

Well	Site Area	Formation	Date Installed	Screened Interval (BGS)		TD BGS (ft.)	TOC Elev (ft. AMSL)
				Top	Bottom		
1400	W of UP1	Sandstone A	11/18/2017	7.2	22.2	22.6	982.38
1401	In NW UP2	Sandstone A	11/16/2017	23.1	43.1	43.5	1002.16
1402	In NE UP2	Sandstone A	11/17/2017	19.6	39.6	40.0	1002.23
1403	E of UP2	Sandstone A	11/20/2017	10.6	30.6	31.0	986.84
1404	N end of GETR-BA1-01	BA1 Transition Zone	11/14/2017	11.3	21.3	21.7	941.47
1405	Center of GETR-BA1-01	BA1 Transition Zone	11/14/2017	11.2	26.2	26.6	944.43
1406	S end of GETR-BA1-01	BA1 Transition Zone	11/15/2017	14.1	24.1	24.5	948.62
1407	Center of GWI-BA1-01	Top of Sandstone B	11/15/2017	5.6	10.6	11.0	957.85
1408	N of GWI-BA1-01	Top of Sandstone B	11/15/2017	5.3	10.3	10.7	957.23
1409	N of GWI-BA1-01	Bottom of Sandstone B	11/15/2017	10.4	25.4	25.8	957.32

Table 2-7 - Revision 0
Monitor Well Inventory - T-Series Wells

Preparer: A. Anstaett; Date: 02/23/21
 Reviewer: E. Dulle; Date: 09/09/22

Well	Site Area	Formation	Date Installed	Screened Interval (BGS)		TD BGS	TOC Elev
				Top	Bottom	(ft.)	(ft. AMSL)
T-51	Western Alluvium	Alluvium	4/1/2003	5.00	19.50	19.50	940.30
T-52	Western Alluvium	Alluvium	4/2/2003	16.50	26.50	27.00	938.98
T-53	Western Alluvium	Alluvium	4/2/2003	12.00	27.00	27.00	938.49
T-54	Western Alluvium	Alluvium	4/2/2003	6.00	15.50	16.00	940.11
T-55	Western Alluvium	Alluvium	4/2/2003	6.00	15.50	16.00	938.57
T-56	Western Alluvium	Alluvium	4/2/2003	5.00	14.50	15.00	937.76
T-57	Western Alluvium	Alluvium	4/2/2003	4.00	19.00	19.50	939.31
T-58	Western Alluvium	Alluvium	4/2/2003	5.00	19.50	20.00	939.88
T-59	Western Alluvium	Alluvium	4/3/2003	7.00	26.00	27.00	938.00
T-60	Western Alluvium	Alluvium	4/3/2003	7.00	26.50	27.00	937.84
T-61	Western Alluvium	Alluvium	4/3/2003	5.00	24.50	25.00	937.94
T-62	Western Alluvium	Alluvium	7/7/2003	4.80	19.30	19.80	941.16
T-63	Western Alluvium	Alluvium	7/7/2003	8.80	23.30	23.80	940.51
T-64	Western Alluvium	Alluvium	7/21/2003	7.50	17.00	17.50	943.54
T-65	Western Alluvium	Alluvium	7/22/2003	7.50	22.00	22.50	941.06
T-66	Western Alluvium	Alluvium	3/2/2004	10.00	29.50	30.00	940.03
T-67	Western Alluvium	Alluvium	3/2/2004	9.00	28.50	29.00	940.55
T-68	Western Alluvium	Alluvium	4/15/2004	7.30	27.30	27.80	939.92
T-69	Western Alluvium	Alluvium	4/16/2004	7.00	26.50	27.00	940.09
T-70R	Western Alluvium	Alluvium	5/24/2004	8.00	27.50	28.00	940.98
T-72	Western Alluvium	Alluvium	5/24/2004	8.00	27.50	28.00	939.86
T-73	Western Alluvium	Alluvium	5/25/2004	8.50	28.50	28.50	939.56
T-74	Western Alluvium	Alluvium	5/25/2004	11.50	31.50	31.50	941.52
T-75	Western Alluvium	Alluvium	5/25/2004	8.00		28.00	939.73
T-76	Western Alluvium	Alluvium	5/26/2004	8.00	28.00	28.00	939.21
T-77	Western Alluvium	Alluvium	5/26/2004	8.50	28.50	28.50	938.92

Table 2-7 - Revision 0
Monitor Well Inventory - T-Series Wells

Preparer: A. Anstaett; Date: 02/23/21
 Reviewer: E. Dulle; Date: 09/09/22

Well	Site Area	Formation	Date Installed	Screened Interval (BGS)		TD BGS (ft.)	TOC Elev (ft. AMSL)
				Top	Bottom		
T-78	Western Alluvium	Alluvium	5/27/2004	8.00	28.00	28.00	939.22
T-79	Western Alluvium	Alluvium	5/27/2004	7.00	27.00	27.00	938.31
T-81	Western Alluvium	Alluvium	5/27/2004	8.00	28.00	28.00	939.59
T-82	Western Alluvium	Alluvium	5/28/2004	8.00	28.00	28.00	940.80
T-83	Western Alluvium	Alluvium	6/9/2005	6.00	26.00	26.00	939.51
T-84	Western Alluvium	Alluvium	4/11/2011	3.00	27.50	28.00	939.38
T-85	Western Alluvium	Alluvium	4/11/2011	6.00	31.00	31.50	939.37
T-86	Western Alluvium	Alluvium	4/11/2011	2.00	27.00	27.50	939.18
T-87	Western Alluvium	Alluvium	4/12/2011	4.00	29.00	29.50	938.81
T-88	Western Alluvium	Alluvium	4/12/2011	2.50	27.50	28.00	938.99
T-89	Western Alluvium	Alluvium	4/12/2011	6.50	31.50	32.00	939.12
T-90	Western Alluvium	Alluvium	4/12/2011	3.50	28.50	29.00	939.46
T-91	Western Alluvium	Alluvium	9/30/2012	5.00	27.00	27.50	938.07
T-92R	Western Alluvium	Alluvium	12/5/2024	7.50	27.50	28.00	936.14
T-93	Western Alluvium	Alluvium	5/8/2013	3.80	28.80	29.30	938.91
T-94	Western Alluvium	Alluvium	5/8/2013	7.40	27.40	27.90	942.21
T-95	Western Alluvium	Alluvium	5/8/2013	6.90	26.90	27.40	939.18
T-96	Western Alluvium	Alluvium	5/8/2013	6.60	26.60	27.10	939.66
T-97	Western Alluvium	Alluvium	12/4/2014	8.10	28.10	29.50	941.55
T-98	Western Alluvium	Alluvium	12/4/2014	8.66	28.66	29.50	941.30
T-99	Western Alluvium	Alluvium	12/4/2014	7.25	27.25	30.00	941.23
T-100	Western Alluvium	Alluvium	12/8/2014	8.45	28.45	29.50	940.69
T-101	Western Alluvium	Alluvium	12/5/2014	6.33	26.33	28.50	940.69
T-102	Western Alluvium	Alluvium	12/5/2014	7.40	27.40	28.00	938.77
T-103	Western Alluvium	Alluvium	12/5/2014	6.63	26.63	28.00	939.52

Table 2-8 - Revision 0
Monitor Well Inventory - TMW-Series Wells

Preparer: A. Anstaett; Date: 02/23/21
 Reviewer: E. Dulle; Date: 09/09/22

Well	Site Area	Formation	Date Installed	Screened Interval (BGS)		TD BGS (ft.)	TOC Elev (ft. AMSL)
				Top	Bottom		
TMW-01	BA#1	Sandstone B	8/13/1999	10.9	25.9	29	952.80
TMW-02	BA#1	Sandstone B	8/17/1999	14.8	29.4	33	959.88
TMW-05	BA#1	Transition Zone	8/9/1999	8.2	22.7	27	943.32
TMW-06	BA#1	Transition Zone	8/17/1999	6.8	16.4	20	948.69
TMW-07	BA#1	Transition Zone	8/26/1999	4.8	14.4	18	941.52
TMW-08	BA#1	Sandstone B	8/26/1999	9.8	24.4	28	950.71
TMW-09	BA#1	Transition Zone	8/30/1999	7.6	22.1	22	945.67
TMW-13	BA#1	Alluvium	11/16/1999	8.5	18.5	21	939.97
TMW-17	BA#1	Sandstone C	4/18/2000	36.0	46.0	49	948.78
TMW-18	BA#1	Sandstone B	5/10/2000	11.0	18.0	20	941.34
TMW-19	BA#1	Alluvium	4/17/2000	5.0	10.0	12	941.37
TMW-20	BA#1	Sandstone B	5/5/2000	9.0	23.0	27	956.84
TMW-21	BA#1	Sandstone B	5/9/2000	12.0	22.0	25	953.93
TMW-23	BA#1	Sandstone C	5/17/2000	30.4	40.4	40	940.17
TMW-24	BA#1	Alluvium	5/15/2000	15.5	25.5	29	939.09
TMW-25	BA#1	Sandstone B	5/16/2000	9.0	23.5	27	954.44

Table 2-9 - Revision 0
Monitor Well Inventory - Miscellaneous Wells

Preparer: A. Anstaett; Date: 02/23/21
 Reviewer: E. Dulle; Date: 09/09/22

Well	Site Area	Formation	Date Installed	Screened Interval (BGS)		TD BGS (ft.)	TOC Elev (ft. AMSL)
				Top	Bottom		
GE-WA-01	Western Alluvium	Alluvium	9/29/2012	4.5	27.0	27	944.08
MWWA-03	Western Alluvium	Transition Zone	12/15/2005	9.0	14.0	14	947.53
MWWA-09	Western Alluvium	Transition Zone	12/16/2005	7.5	12.5	12.5	947.70
TMP-UP2-01	S of GWI-UP2-01D?	Sandstone A	11/20/2017	19.6	39.6	40	1002.40
TMP-UP2-02	N of GWI-UP2-01D?	Sandstone A	11/17/2017	19.3	39.3	40	1002.52
TR-01	UP1	Sandstone A	11/21/2017	19.8	29.8	30	987.15
TR-02	UP1	Sandstone A	11/16/2017	15.1	25.1	25	997.68
TR-03	UP1	Sandstone A	11/16/2017	16.4	26.4	26	986.56
TR-04	UP2	Sandstone A	11/2/2017	20.5	30.5	31	1003.20
TR-05	UP2	Sandstone A	11/6/2017	20.0	30.0	30	997.62
TR-06	BA1	Sandstone B	10/13/2017	16.0	26.0	26	959.83
TR-07	BA1	Sandstone B	10/10/2017	16.0	26.0	26	960.09
TR-08	BA1	Transition Zone	10/20/2017	11.8	21.8	22	944.44
TR-09	BA1	Transition Zone	10/20/2017	14.0	24.0	24	948.60
TR-10	BA1	Transition Zone	10/20/2017	14.0	24.0	24	949.45

Table 2-10 - Revision 0
Burial Area #1 Groundwater Elevations
December 2012 Through May 2018

Preparer: D. Horne; Date 09/28/21
 Reviewer: E. Dulle; Date 09/09/22

Well	Top of Casing Elevation Feet Above Mean Sea Level	Groundwater Elevation - Feet Above Mean Sea Level (North American Vertical Datum 1988)														
		December 2012	August 8, 2013	November 15, 2013	March 18, 2015	February 15, 2016	May 6, 2016	August 8, 2016	October 14, 2016	February 6, 2017	April 17, 2017	July 31, 2017	November 6, 2017	February 5, 2018	May 7, 2018	Mean
ALLUVIAL WELLS																
02W03	940.22	927.80	930.97	928.93	928.53	931.27	932.72	928.42	927.14	928.72	930.20	927.71	928.96	929.54	929.72	929.3
02W04	939.27	926.99	930.85	928.01	927.56	930.35	932.17	927.88	927.55	927.83	929.57	927.49	928.51	928.29	928.76	928.7
02W05	938.62	926.97	931.37	928.00	927.53	930.31	932.13	927.88	927.52	927.82	929.56	927.52	928.82	928.29	928.71	928.7
02W06	938.67	926.95	930.85	927.99	927.48	930.27	932.04	927.87	927.53	927.82	929.55	927.52	928.80	928.25	928.67	928.7
02W07	939.14	926.96	930.89	927.97	927.49	930.33	932.08	927.87	927.53	927.84	929.59	927.50	928.82	928.29	928.74	928.7
02W08	939.45	926.92	931.14	927.97	927.48	930.37	932.11	927.85	927.51	927.82	929.65	927.43	928.80	928.28	928.73	928.7
02W11	940.04	926.82	931.04	927.91	927.45	930.53	932.01	927.74	927.43	927.76	929.88	927.33	928.71	928.31	928.89	928.7
02W12	940.21	926.83	931.12	927.84	927.42	930.61	932.10	927.73	927.46	927.79	929.98	927.37	928.76	928.37	928.99	928.7
02W14	939.96	926.85	930.89	927.88	927.47	930.33	931.94	927.76	927.46	927.76	929.67	927.36	928.70	928.23	928.70	928.6
02W15	938.50	928.00	930.85	928.03	927.56	930.36	932.25	927.91	927.55	927.85	929.53	927.50	928.86	928.35	928.72	928.8
02W16	937.83	927.00	930.84	928.03	927.51	930.29	932.10	927.90	927.54	927.83	929.51	927.57	928.83	928.23	928.65	928.7
02W17	939.01	926.97	930.80	927.99	927.46	930.19	932.01	927.86	927.54	927.80	929.48	927.53	928.82	928.21	928.61	928.7
02W18	939.26	926.84	930.78	927.89	927.39	930.15	931.76	927.74	927.78	927.72	929.52	927.37	928.63	928.13	928.58	928.6
02W19	939.44	926.92	930.81	927.96	927.46	930.18	931.94	927.82	927.50	927.68	929.51	927.45	928.74	928.22	928.64	928.6
02W21	939.19	926.96	930.72	927.97	927.45	930.05	931.88	928.41	926.51	927.77	929.33	927.49	928.78	928.11	928.44	928.6
02W22	937.73	927.00	930.80	928.02	927.51	929.46	932.08	927.89	927.54	928.80	929.43	927.61	928.86	926.45	928.62	928.6
02W23	937.86	926.99	930.78	928.01	927.46	930.15	932.01	927.89	927.53	927.81	928.41	927.54	928.85	928.26	928.56	928.6
02W24	939.24	926.94	930.34	927.93	927.43	930.12	931.89	927.83	927.49	927.78	929.43	927.44	928.75	928.16	928.54	928.6
02W32	939.70	926.94	930.98	928.00	927.54	930.50	932.22	927.87	927.53	927.88	929.80	927.48	928.85	928.42	928.96	928.8
02W33	937.87	927.01	930.82	928.06	927.55	930.31	932.17	927.96	927.60	927.87	929.52	927.62	928.88	928.27	928.66	928.7
02W34	938.59	926.95	930.10	927.96	927.43	929.99	931.79	927.84	927.54	927.75	929.30	927.49	928.70	928.07	928.43	928.5
02W35	938.45	926.89	930.64	927.87	927.38	929.93	931.64	927.75	927.50	927.71	929.29	927.40	928.61	928.05	928.37	928.5
02W36	938.68	926.93	930.70	927.92	927.42	930.01	931.75	927.78	927.52	927.74	929.34	927.41	928.68	928.07	928.44	928.5
02W37	938.87	926.85	930.68	927.82	927.35	929.97	931.58	927.69	927.47	927.67	929.37	927.37	928.55	928.02	928.40	928.5
02W38	940.08	926.81	930.84	927.86	927.37	930.24	931.79	927.70	927.42	927.69	929.63	927.32	928.63	928.16	928.63	928.6
02W43	939.06	926.84	930.64	927.79	927.34	929.89	931.49	927.66	927.41	927.67	929.33	927.29	928.51	928.00	928.35	928.4
02W44	939.00	926.79	930.70	927.79	927.32	930.00	931.57	927.65	927.35	927.65	929.44	927.26	928.52	928.03	928.40	928.5
02W45	939.22	926.86	930.63	927.81	927.34	929.88	931.51	927.69	927.45	927.69	929.31	927.32	928.55	928.00	928.33	928.4
02W62	938.53	926.88	930.63	928.14	927.37	929.90	931.66	927.77	927.47	927.70	929.26	927.38	928.63	928.02	928.35	928.5
1344	937.90	926.26	930.02	927.21	926.85	928.91	930.01	926.97	927.02	927.22	928.96	926.20	927.57	927.31	927.50	927.7
1361	940.28	926.69	930.63	927.69	927.23	929.83	931.28	927.53	927.34	927.57	929.39	927.16	928.37	927.94	928.28	928.4
1362	939.95	--	930.81	927.77	927.30	930.14	931.59	927.61	927.38	927.65	929.61	927.20	928.52	928.07	928.57	928.6
1363	939.72	--	930.52	927.68	927.27	929.69	931.22	927.56	927.38	927.60	929.26	928.55	928.36	927.87	928.17	928.5
1364	939.47	--	930.70	927.67	927.24	929.98	930.32	927.51	927.32	926.86	929.54	927.07	928.34	927.96	928.37	928.4
1365	939.66	--	930.53	927.65	927.22	929.71	931.14	927.49	927.35	927.56	929.34	927.11	928.28	927.84	928.16	928.4
1366	940.30	--	930.61	927.62	927.19	929.81	931.12	927.45	927.30	927.55	929.45	927.04	928.25	927.85	928.20	928.4

Table 2-10 - Revision 0
Burial Area #1 Groundwater Elevations
December 2012 Through May 2018

Well	Top of Casing Elevation Feet Above Mean Sea Level	Groundwater Elevation - Feet Above Mean Sea Level (North American Vertical Datum 1988)														Mean
		December 2012	August 8, 2013	November 15, 2013	March 18, 2015	February 15, 2016	May 6, 2016	August 8, 2016	October 14, 2016	February 6, 2017	April 17, 2017	July 31, 2017	November 6, 2017	February 5, 2018	May 7, 2018	
ALLUVIAL WELLS																
1367	939.26	--	--	--	927.31	929.74	931.39	927.64	927.44	927.65	929.21	927.26	928.47	927.93	928.24	928.4
1368	940.15	--	--	--	927.19	929.31	930.80	927.42	927.36	927.54	929.03	927.07	928.12	927.68	927.90	928.1
1369	939.98	--	--	--	927.04	928.98	930.30	927.23	927.25	927.41	928.89	926.88	927.80	927.48	927.58	927.9
1370	939.20	--	--	--	927.08	929.53	930.74	927.29	927.20	927.46	929.35	927.03	928.00	927.69	928.00	928.1
1371	935.32	--	--	--	926.86	928.37	929.45	926.90	927.03	927.19	928.48	927.52	927.35	927.10	927.20	927.6
1372	937.52	--	--	--	926.77	927.55	928.91	926.71	926.95	927.08	928.20	926.37	927.03	926.88	926.89	927.2
1373	935.52	--	--	--	926.77	925.89	929.16	926.78	926.96	927.13	928.34	926.40	927.19	927.01	927.07	927.2
TMW-13	939.97	926.96	930.92	928.03	927.52	930.43	932.19	927.90	927.52	927.85	929.67	927.48	928.81	928.36	928.86	928.7
TMW-19	941.37	929.74	930.81	929.00	929.02	931.34	933.05	928.99	928.96	928.92	929.97	918.51	929.03	929.27	929.50	929.0
TMW-24	939.09	926.67	930.42	927.58	927.17	929.54	930.96	927.44	927.29	927.53	929.18	918.42	928.16	927.74	928.07	927.6
TRANSITION ZONE WELLS																
02W01	943.73	932.47	934.18	933.37	933.44	935.71	937.04	933.00	931.66	933.60	934.73	932.07	932.83	933.36	933.41	933.6
02W02	941.35	930.03	932.34	930.97	931.09	933.28	934.60	930.53	929.55	931.11	932.55	929.80	930.65	931.78	932.15	931.5
02W09	948.44	934.67	936.21	935.67	935.69	937.40	938.42	935.13	933.84	935.69	936.50	933.94	938.40	935.14	935.54	935.9
02W10	944.49	933.58	935.40	934.73	934.80	936.49	937.39	933.81	932.76	934.93	935.87	932.90	931.14	934.54	934.88	934.5
02W13	939.52	926.95	931.18	928.14	927.67	930.86	932.46	927.93	927.52	927.92	930.07	927.49	928.99	927.69	929.36	928.9
02W20	950.81	937.47	937.60	937.78	937.75	938.30	938.71	937.12	936.92	937.69	937.86	935.69	937.60	937.85	938.88	937.7
02W26	951.85	935.70	936.79	936.45	936.50	937.80	938.79	935.88	934.88	936.46	937.00	934.55	935.96	936.25	936.94	936.4
02W28	946.41	933.40	935.18	934.48	934.57	936.45	937.46	933.91	932.59	934.68	935.71	932.81	934.44	934.26	934.46	934.6
02W39	950.14	934.77	936.40	935.76	935.79	937.60	938.79	935.29	933.96	935.77	936.59	934.14	935.03	935.01	935.33	935.7
TMW-05	943.32	932.00	934.10	933.27	933.51	935.16	935.93	932.30	931.01	933.50	934.62	931.20	933.24	933.70	934.04	933.4
TMW-06	948.69	934.27	935.99	935.43	935.44	936.94	937.68	934.64	933.26	935.53	936.30	933.21	935.01	935.27	935.79	935.3
TMW-07	941.52	931.34	933.11	932.41	932.57	934.27	935.18	931.57	930.46	932.60	933.77	930.73	932.62	933.12	933.42	932.7
TMW-09	945.67	933.05	934.87	934.11	934.16	936.32	937.55	933.65	932.28	934.28	935.36	932.62	933.27	933.80	933.95	934.2
SANDSTONE B WELLS																
02W25	957.38	945.88	948.26	947.82	945.43	951.27	951.69	948.51	946.87	946.59	950.13	946.28	940.01	941.23	941.13	946.5
02W27	944.97	931.66	933.68	932.37	932.21	934.97	936.62	932.18	930.89	932.44	933.62	931.41	932.13	932.69	932.57	932.8
02W30	946.64	934.11	937.15	935.15	934.83	938.20	939.74	934.91	933.01	935.10	936.53	933.73	933.80	934.84	934.64	935.4
02W40	954.62	938.93	939.93	939.61	939.13	940.71	941.50	939.37	938.74	939.26	939.72	938.79	939.21	940.26	940.57	939.7
02W41	953.50	937.41	938.28	937.99	937.85	939.40	940.33	937.77	937.19	938.03	938.50	936.80	937.64	938.51	938.70	938.2
02W42	951.21	936.82	941.46	938.96	937.70	942.86	943.91	937.06	934.94	937.91	941.34	935.64	935.34	937.21	936.28	938.4
02W47	957.14	944.58	941.00	940.58	939.91	941.74	942.48	940.39	939.73	940.14	940.99	939.70	939.89	940.96	941.24	941.0
02W50	961.14	940.17	941.49	941.10	940.38	942.09	942.73	940.91	940.29	940.61	940.91	940.30	940.44	941.24	941.83	941.0
02W51	962.18	950.54	953.13	952.43	950.63	953.53	954.18	952.18	951.11	950.78	952.68	950.68	951.67	951.07	951.30	951.8
02W52	960.86	939.54	940.74	940.34	939.75	941.40	942.11	940.25	939.61	939.96	940.28	939.66	940.05	941.23	941.44	940.4
02W53	943.76	931.73	933.84	932.42	932.26	935.11	936.79	932.28	930.95	932.48	933.65	931.46	932.43	932.77	932.66	932.9

Table 2-10 - Revision 0
Burial Area #1 Groundwater Elevations
December 2012 Through May 2018

Preparer: D. Horne; Date 09/28/21
 Reviewer: E. Dulle; Date 09/09/22

Well	Top of Casing Elevation Feet Above Mean Sea Level	Groundwater Elevation - Feet Above Mean Sea Level (North American Vertical Datum 1988)															
		December 2012	August 8, 2013	November 15, 2013	March 18, 2015	February 15, 2016	May 6, 2016	August 8, 2016	October 14, 2016	February 6, 2017	April 17, 2017	July 31, 2017	November 6, 2017	February 5, 2018	May 7, 2018	Mean	
SANDSTONE B WELLS																	
1314	972.01	943.10	944.80	944.61	943.25	945.41	945.71	944.45	943.62	943.81	943.74	943.61	943.49	944.37	944.39	944.2	
1315R	949.05	933.88	936.05	934.94	934.95	937.55	939.05	934.62	933.12	935.02	936.05	933.61	934.02	934.16	934.35	935.1	
1316R	946.45	N/A	935.72	933.45	932.85	937.27	939.14	933.38	931.65	933.23	934.95	932.33	933.23	933.71	933.35	934.2	
TMW-01	952.80	939.94	942.27	941.11	940.61	945.60	946.09	942.72	940.23	941.07	943.87	939.96	938.49	939.81	939.64	941.5	
TMW-02	959.88	939.98	941.30	941.02	940.03	941.98	942.68	940.77	940.12	940.47	940.88	940.08	939.94	941.35	941.62	940.9	
TMW-08	950.71	934.63	936.62	935.71	935.61	937.82	939.11	935.37	934.03	935.73	936.66	934.29	934.90	935.01	935.25	935.8	
TMW-18	941.34	927.56	930.83	928.69	928.19	931.28	933.02	928.12	927.25	928.39	929.90	927.44	928.53	929.21	929.49	929.1	
TMW-20	956.84	N/A	939.43	939.13	938.59	940.09	940.99	N/A	N/A	N/A	N/A	DRY	DRY	939.55	939.96	939.7	
TMW-21	953.93	936.53	943.03	937.88	936.33	943.96	944.83	937.22	935.46	936.80	944.76	936.13	936.04	938.38	936.71	938.9	
TMW-25	954.44	937.22	937.81	937.87	937.66	938.83	939.63	937.22	936.55	937.69	938.04	935.93	937.46	938.01	938.71	937.8	
MISCELLANEOUS WELLS																	
TR-06	959.83	--	--	--	--	--	--	--	--	--	--	--	--	938.27	940.22	941.45	940.0
TR-07	960.09	--	--	--	--	--	--	--	--	--	--	--	--	939.14	941.01	941.41	940.5
TR-08	944.44	--	--	--	--	--	--	--	--	--	--	--	--	933.16	934.09	934.24	933.8
TR-09	948.60	--	--	--	--	--	--	--	--	--	--	--	--	933.17	934.10	934.20	933.8
TR-10	949.45	--	--	--	--	--	--	--	--	--	--	--	--	933.09	934.05	934.16	933.8

Notes:
 -- indicates monitor well not yet installed
 N/A - no data recorded

Table 2-11 - Revision 0
Sandstone A Groundwater Elevations
December 2012 Through May 2018

Preparer: D. Horne; Date 09/28/21
 Reviewer: E. Dulle; Date 09/09/22

Well	Top of Casing Elevation Feet Above Mean Sea Level	Groundwater Elevation - Feet Above Mean Sea Level (North American Vertical Datum 1988)														
		December 2012	August 8, 2013	November 15, 2013	March 18, 2015	February 15, 2016	May 6, 2016	August 8, 2016	October 14, 2016	February 6, 2017	April 17, 2017	July 31, 2017	November 6, 2017	February 5, 2018	May 7, 2018	Mean
SANDSTONE A WELLS																
1311	996.10	966.41	968.32	967.95	965.01	967.30	967.64	968.16	967.47	967.00	966.40	967.32	966.74	967.25	967.14	967.2
1312	992.66	964.75	966.12	966.17	963.39	965.26	965.45	966.08	965.66	965.34	964.76	965.44	965.01	965.31	966.63	965.3
1313	995.09	964.61	965.67	966.09	963.65	965.14	965.27	965.89	965.55	965.15	964.69	965.24	964.89	965.11	966.42	965.2
1319A-1	1,010.13	971.12	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	971.1
1319A-2	1,010.28	969.73	970.00	970.33	969.24	970.04	970.18	970.46	970.42	970.44	969.88	969.56	969.95	DRY	DRY	970.0
1319A-3	1,010.43	970.30	970.41	970.18	969.37	968.94	N/A	969.01	969.07	969.21	969.28	968.97	969.02	969.21	969.25	969.4
1320	1,001.74	968.85	971.06	970.64	967.09	969.79	969.98	970.49	969.92	969.62	968.74	966.83	969.04	969.30	968.62	969.3
1322	1,001.72	967.31	969.11	968.59	966.27	969.11	969.52	969.58	968.75	967.88	967.72	968.58	968.13	967.70	967.61	968.3
1324	997.63	969.82	971.94	971.57	968.17	970.58	971.13	971.10	970.63	970.41	969.68	970.27	969.82	969.72	969.48	970.4
1325	1,006.81	972.51	974.92	974.61	970.93	973.81	974.16	974.68	973.85	973.41	972.46	973.93	972.90	972.96	971.95	973.5
1326	1,009.05	970.44	971.32	971.56	969.81	971.48	971.68	971.94	971.50	971.43	970.85	971.33	970.94	971.21	970.97	971.2
1327B	1,008.90	966.91	967.35	967.35	965.15	967.52	967.84	967.86	967.14	966.83	966.35	966.82	966.38	966.28	966.24	966.9
1329	1,007.46	968.24	968.75	968.91	967.70	968.65	968.84	969.04	968.81	969.00	968.66	968.13	968.43	968.63	968.60	968.6
1330	997.87	967.77	968.96	969.67	967.70	970.62	971.73	969.67	968.64	969.97	970.65	968.94	968.48	969.79	970.52	969.4
1331	978.34	965.29	967.23	966.30	963.94	967.02	968.04	967.09	966.43	965.69	966.14	966.26	965.72	965.36	965.28	966.2
1333	990.15	967.34	969.77	968.51	967.11	969.60	971.19	969.66	968.63	967.75	967.55	968.65	967.80	967.58	967.55	968.6
1334	980.76	966.39	968.42	966.98	965.46	968.38	969.80	967.06	966.57	966.52	967.94	966.65	967.46	966.86	966.55	967.3
1335A	998.70	971.72	973.40	973.22	969.90	972.25	972.73	973.35	972.80	972.30	971.50	972.28	971.80	971.81	971.20	972.2
1336A	988.29	960.06	961.02	960.92	959.04	960.63	960.86	960.99	960.63	960.29	959.89	960.59	960.20	960.39	960.19	960.4
1337	994.45	966.30	968.98	968.10	964.87	967.88	968.24	968.63	967.66	966.84	966.30	967.75	967.09	967.36	966.74	967.4
1340	984.83	962.54	964.28	963.77	961.34	963.38	963.75	963.64	963.21	962.89	962.59	961.90	962.89	963.45	963.98	963.1
1347	996.33	967.12	969.38	968.88	964.22	967.83	968.18	969.48	968.64	967.76	966.72	968.04	967.38	967.43	965.22	967.8
1348	999.54	974.63	978.04	976.93	974.15	978.43	979.24	977.02	975.72	976.09	977.16	977.68	976.38	977.51	977.33	976.8
1349	994.03	971.05	974.30	972.52	970.30	974.67	976.99	973.38	972.10	971.71	972.73	972.51	972.06	972.44	971.84	972.8
1350	992.91	974.45	977.92	976.41	973.57	978.23	979.06	976.75	975.51	975.55	976.91	975.91	976.40	977.41	977.13	976.5
1351	982.44	969.95	971.39	970.72	969.37	971.24	972.22	970.92	970.47	970.24	970.53	970.39	970.90	969.88	970.64	970.6
1352	985.60	967.07	968.79	968.39	965.90	967.95	968.45	968.57	968.05	967.60	967.05	967.70	967.49	967.52	967.55	967.7
1353	997.98	985.80	988.04	988.05	986.87	989.13	989.28	985.37	985.13	987.70	988.77	986.85	988.27	988.35	987.77	987.5
1354	989.34	966.30	968.03	967.64	965.09	967.14	967.48	967.78	967.24	966.84	966.34	966.99	966.59	966.80	967.08	966.9
1355	995.92	968.54	970.94	970.29	966.75	969.72	970.44	971.15	970.16	969.12	968.39	969.84	969.01	969.07	968.95	969.5
1356	985.21	968.78	970.16	969.69	968.15	969.81	970.55	969.73	969.37	969.09	968.96	969.13	969.33	969.45	969.21	969.4
1357	990.53	969.63	971.93	971.16	968.28	971.04	972.07	971.95	970.97	970.20	969.67	970.83	970.27	970.34	970.21	970.6
1358	989.60	970.97	973.40	972.42	969.95	972.95	974.25	972.96	971.98	971.51	971.46	972.08	971.68	972.32	972.08	972.2
1359	984.05	971.30	973.08	972.25	970.66	973.30	974.15	972.51	971.87	971.74	972.47	971.91	972.22	972.64	972.60	972.3
1360	985.20	972.42	975.30	973.96	971.77	975.85	976.67	974.25	973.26	973.24	974.77	973.47	974.00	971.44	974.75	973.9
1374	1,010.82	--	--	--	DRY	968.48	968.61	968.75	968.41	968.56	967.17	968.31	967.91	DRY	968.04	968.3

Table 2-11 - Revision 0
Sandstone A Groundwater Elevations
December 2012 Through May 2018

Preparer: D. Horne; Date 09/28/21
 Reviewer: E. Dulle; Date 09/09/22

Well	Top of Casing Elevation Feet Above Mean Sea Level	Groundwater Elevation - Feet Above Mean Sea Level (North American Vertical Datum 1988)														
		December 2012	August 8, 2013	November 15, 2013	March 18, 2015	February 15, 2016	May 6, 2016	August 8, 2016	October 14, 2016	February 6, 2017	April 17, 2017	July 31, 2017	November 6, 2017	February 5, 2018	May 7, 2018	Mean
SANDSTONE A WELLS																
1375	1,010.73	--	--	--	968.32	968.82	969.02	969.31	969.27	969.43	996.13	971.57	968.96	969.10	969.00	972.0
1376	1,009.79	--	--	--	968.66	970.13	970.49	970.99	970.71	970.35	969.74	970.73	969.90	970.06	969.81	970.2
1377	988.71	--	--	--	963.41	965.80	966.53	966.43	965.88	965.19	964.97	965.59	965.02	964.79	964.53	965.4
1378	979.24	--	--	--	961.98	963.39	963.83	963.46	963.19	963.04	963.02	963.05	962.94	962.92	962.91	963.1
1379	981.16	--	--	--	963.31	965.91	966.95	965.70	964.95	964.58	964.51	964.96	964.78	964.67	964.48	965.0
1380	998.58	--	--	--	966.84	969.69	970.36	970.16	969.33	968.63	968.13	969.10	968.46	968.26	968.18	968.9
1381	997.25	--	--	--	970.60	974.30	975.00	974.50	973.76	973.07	972.80	973.90	973.55	973.28	973.14	973.5
1383	1,002.26	--	--	--	966.17	969.01	969.17	969.98	969.40	968.66	968.03	969.07	968.32	970.12	969.08	968.8
1385	993.89	--	--	--	963.72	966.24	966.33	967.26	966.47	965.71	964.91	966.45	965.54	966.44	965.29	965.9
1387	981.48	--	--	--	964.30	967.18	968.13	967.07	966.35	965.75	965.98	966.53	966.59	966.08	965.98	966.4
1389	987.94	--	--	--	963.90	967.19	967.77	967.87	966.79	965.80	965.15	967.14	966.22	966.04	965.56	966.4
1393	992.48	--	--	--	960.44	962.81	963.13	963.72	963.08	962.30	961.48	963.18	962.33	962.88	962.13	962.5
PILOT TEST WELLS																
1395	986.25	--	--	--	--	--	--	--	--	--	--	--	964.80	965.20	965.99	965.0
1396	987.17	--	--	--	--	--	--	--	--	--	--	--	964.71	965.88	966.59	965.3
1397	982.33	--	--	--	--	--	--	--	--	--	--	--	962.73	967.15	965.59	964.9
1398	984.95	--	--	--	--	--	--	--	--	--	--	--	965.11	965.36	965.65	965.2
1399	989.91	--	--	--	--	--	--	--	--	--	--	--	966.15	966.83	966.91	966.5
1400	982.38	--	--	--	--	--	--	--	--	--	--	--	964.38	968.32	965.67	966.4
1401	1,002.16	--	--	--	--	--	--	--	--	--	--	--	967.16	969.92	967.86	968.5
1402	1,002.23	--	--	--	--	--	--	--	--	--	--	--	967.70	969.23	967.75	968.5
1403	986.84	--	--	--	--	--	--	--	--	--	--	--	968.11	969.00	967.96	968.6
MISCELLANEOUS WELLS																
TR-01	987.15	--	--	--	--	--	--	--	--	--	--	--	952.85	975.15	966.34	964.0
TR-02	997.68	--	--	--	--	--	--	--	--	--	--	--	975.03	975.60	976.38	975.3
TR-03	986.56	--	--	--	--	--	--	--	--	--	--	--	963.28	975.82	966.38	969.6
TR-05	997.62	--	--	--	--	--	--	--	--	--	--	--	968.52	971.27	969.14	969.9

Notes:
 -- indicates monitor well not yet installed
 N/A - no data recorded

Table 2-12 - Revision 0
Western Alluvial Area and Sandstone B Groundwater Elevations
December 2012 Through May 2018

Preparer: D. Horne; Date 09/28/21
 Reviewer: E. Dulle; Date 09/09/22

Well	Top of Casing Elevation Feet Above Mean Sea Level	Groundwater Elevation - Feet Above Mean Sea Level (North American Vertical Datum 1988)														
		December 2012	August 8, 2013	November 15, 2013	March 18, 2015	February 15, 2016	May 6, 2016	August 8, 2016	October 14, 2016	February 6, 2017	April 17, 2017	July 31, 2017	November 6, 2017	February 5, 2018	May 7, 2018	Mean
ALLUVIAL WELLS																
1343	941.58	927.84	931.10	928.59	928.11	929.43	930.58	928.27	928.40	928.31	929.21	928.21	928.86	928.25	928.29	928.8
T-51	940.30	928.75	931.63	929.71	929.12	930.18	931.18	929.40	929.33	929.12	930.00	929.44	929.55	929.04	929.00	929.7
T-52	938.98	928.65	931.55	929.59	928.98	930.12	931.10	929.33	929.20	929.00	929.86	929.36	929.51	928.95	928.93	929.6
T-53	938.49	928.51	931.45	929.46	928.55	930.17	931.13	929.20	929.00	928.89	929.71	929.27	929.53	928.88	928.88	929.5
T-54	940.11	929.09	931.93	930.36	929.48	929.48	932.48	929.90	929.40	929.46	930.27	930.06	930.67	929.87	929.91	930.2
T-55	938.57	928.86	931.75	930.09	929.25	931.21	932.40	928.46	929.12	929.22	930.07	929.66	930.55	929.67	929.77	930.0
T-56	937.76	928.81	931.66	929.89	929.08	931.21	932.53	927.75	928.91	929.06	929.96	929.51	930.56	929.53	929.73	929.9
T-57	939.31	929.21	932.28	930.51	929.63	931.49	932.60	930.23	929.59	929.56	930.35	930.31	930.63	929.90	929.93	930.4
T-58	939.88	929.23	932.27	930.55	929.65	931.42	932.59	930.42	929.72	929.55	930.36	930.55	930.55	929.84	929.97	930.5
T-59	938.00	928.41	931.43	929.43	928.73	930.34	931.34	929.18	928.89	928.83	929.61	929.30	929.70	928.96	928.95	929.5
T-60	937.84	928.40	931.60	929.48	928.74	930.81	932.02	929.20	928.78	928.79	929.62	929.30	930.14	929.13	929.23	929.7
T-61	937.94	928.17	931.59	929.24	928.51	931.07	932.56	929.03	928.54	928.64	929.43	929.04	930.35	928.99	929.28	929.6
T-62	941.16	929.38	932.49	930.76	929.83	931.76	933.06	930.69	929.91	929.71	930.51	930.81	930.61	930.01	930.08	930.7
T-63	940.51	929.28	932.30	930.63	929.74	931.51	932.69	930.50	929.80	929.63	930.41	930.64	930.81	929.90	929.98	930.6
T-64	943.54	929.49	932.56	930.92	929.95	932.12	933.38	930.85	930.05	929.91	930.59	930.93	930.73	930.16	930.34	930.9
T-65	941.06	N/A	932.40	930.69	929.76	931.61	932.80	930.65	929.89	929.70	930.44	930.76	930.55	929.91	930.06	930.7
T-66	940.03	929.26	932.29	930.60	929.71	931.43	932.59	930.53	929.81	929.63	930.35	930.68	930.48	929.85	929.93	930.5
T-67	940.55	929.29	932.36	930.65	929.74	931.45	932.66	930.61	929.84	929.63	930.40	930.65	930.50	929.88	929.95	930.5
T-68	939.92	929.09	932.11	930.34	929.55	930.97	932.08	930.25	929.71	929.48	930.25	930.32	930.20	929.57	929.62	930.2
T-69	940.09	929.13	932.14	930.40	929.59	931.08	932.26	930.35	929.71	929.48	930.27	930.44	930.33	929.69	929.73	930.3
T-70R	940.98	929.36	932.43	930.74	929.83	931.56	932.77	930.72	929.96	929.73	930.40	930.84	930.57	929.95	929.53	930.6
T-72	939.86	929.17	932.25	930.47	929.63	931.15	932.35	930.40	929.76	929.55	930.31	930.45	930.30	929.69	929.76	930.4
T-73	939.56	929.24	932.26	930.61	929.68	931.26	932.38	930.53	929.85	929.65	930.36	930.66	930.38	929.74	929.76	930.5
T-74	941.52	929.38	932.52	930.79	929.83	931.61	932.81	930.80	930.00	929.77	930.44	930.90	930.62	929.99	930.07	930.7
T-75	939.73	929.17	932.18	930.46	929.61	931.12	932.23	930.08	929.80	929.53	930.31	930.48	930.31	929.69	929.73	930.3
T-76	939.21	929.24	932.29	930.56	929.70	931.34	932.47	930.52	929.81	929.64	930.37	930.66	930.44	929.79	929.86	930.5
T-77	938.92	929.12	932.18	930.38	929.57	930.98	932.12	930.29	929.74	929.52	930.27	930.38	930.22	929.59	929.62	930.3
T-78	939.22	929.16	932.20	930.44	929.61	931.07	932.21	930.39	929.80	929.57	930.30	930.47	930.27	929.62	929.66	930.3
T-79	938.31	929.02	932.00	930.21	929.36	930.68	931.82	930.07	929.68	929.41	930.21	930.12	930.03	929.39	929.43	930.1
T-81	939.59	929.13	932.10	930.38	929.57	930.95	932.10	930.29	929.75	929.52	930.30	930.37	930.21	929.56	929.59	930.3
T-82	940.80	928.97	931.95	930.09	929.39	930.47	931.62	931.77	929.61	929.35	930.19	929.92	929.87	929.30	929.29	930.1
T-83	939.51	929.02	931.95	930.18	929.46	930.61	931.75	929.80	929.67	929.41	930.23	930.01	929.96	929.36	929.39	930.1
T-84	939.38	928.97	931.93	930.13	929.37	930.64	931.62	929.92	929.55	929.38	930.14	929.98	929.97	929.36	929.39	930.0
T-85	939.37	928.88	931.83	930.02	929.28	930.67	931.61	929.81	929.38	929.23	930.05	929.86	930.00	929.37	929.34	929.9
T-86	939.18	928.77	931.74	929.94	929.17	930.86	931.87	929.63	929.17	929.03	929.96	929.74	930.15	929.33	929.42	929.9
T-87	938.81	928.61	931.63	929.80	928.99	930.93	932.05	929.40	928.94	928.93	929.81	929.51	930.23	929.35	929.43	929.8

Table 2-12 - Revision 0
Western Alluvial Area and Sandstone B Groundwater Elevations
December 2012 Through May 2018

Preparer: D. Horne; Date 09/28/21
 Reviewer: E. Dulle; Date 09/09/22

Well	Top of Casing Elevation Feet Above Mean Sea Level	Groundwater Elevation - Feet Above Mean Sea Level (North American Vertical Datum 1988)														
		December 2012	August 8, 2013	November 15, 2013	March 18, 2015	February 15, 2016	May 6, 2016	August 8, 2016	October 14, 2016	February 6, 2017	April 17, 2017	July 31, 2017	November 6, 2017	February 5, 2018	May 7, 2018	Mean
ALLUVIAL WELLS																
T-88	938.99	928.35	931.55	929.53	928.72	931.04	932.30	929.10	928.67	928.72	929.59	929.24	930.32	929.21	929.37	929.7
T-89	939.12	928.24	931.10	929.07	928.51	929.72	930.73	928.73	928.76	928.66	929.48	928.75	929.17	928.59	928.56	929.2
T-90	939.46	928.38	931.16	929.19	928.62	929.75	930.67	928.85	928.90	928.76	929.63	928.84	929.17	928.64	928.60	929.2
T-91	938.07	928.23	930.98	928.97	928.50	929.85	930.42	927.63	928.78	928.65	929.46	928.59	928.96	928.48	928.43	929.0
T-92R	936.12	928.17	930.95	928.94	925.69	926.82	927.81	925.85	925.98	925.87	926.72	925.87	926.29	925.76	925.71	926.9
T-93	938.91	--	931.10	928.93	928.38	929.92	931.09	928.66	928.57	928.51	929.36	928.67	929.36	928.55	928.60	929.2
T-94	942.21	--	930.70	928.70	928.26	929.26	930.23	928.31	928.53	928.46	929.26	928.64	928.74	928.30	928.27	928.9
T-95	939.18	--	931.28	929.36	928.82	929.86	930.81	928.98	929.08	928.89	929.75	929.04	929.27	928.77	928.76	929.4
T-96	939.66	--	931.71	929.83	929.18	930.32	931.35	929.56	929.38	929.17	930.01	929.61	929.69	929.11	929.11	929.8
T-97	941.55	--	--	--	928.75	929.60	930.51	928.78	929.01	928.81	929.71	928.75	929.00	928.67	928.57	929.1
T-98	941.30	--	--	--	928.66	929.46	930.33	928.61	928.92	928.78	929.65	928.29	928.84	928.58	928.50	929.0
T-99	941.23	--	--	--	928.33	929.08	929.85	928.25	928.68	928.63	929.38	928.23	928.43	928.27	928.26	928.7
T-100	940.69	--	--	--	928.22	928.22	929.60	927.05	928.40	928.43	929.09	927.99	928.35	928.19	928.10	928.3
T-101	940.69	--	--	--	928.04	929.02	929.97	927.99	928.32	928.27	929.09	927.94	928.49	928.13	928.08	928.5
T-102	938.77	--	--	--	928.30	930.22	931.59	928.69	928.53	928.47	929.35	928.72	929.61	928.63	928.74	929.2
T-103	939.52	--	--	--	928.31	931.68	933.66	928.86	928.34	928.47	929.55	928.75	930.63	929.00	929.44	929.7
SANDSTONE B WELLS																
1319B-1	1,009.65	946.05	948.94	948.11	946.31	949.23	949.55	947.62	946.44	947.08	947.71	946.85	947.19	948.25	948.41	947.7
1319B-2	1,011.37	947.09	949.92	949.16	947.38	950.27	950.59	948.71	947.55	948.17	948.81	948.07	948.26	949.30	949.46	948.8
1319B-3	1,011.22	946.20	949.06	948.24	946.47	949.39	949.72	947.82	946.60	947.22	947.80	947.31	947.31	946.61	948.54	947.7
1319B-4	1,009.46	945.48	948.41	947.58	945.78	948.50	949.03	947.11	945.89	946.53	947.17	946.65	946.62	947.55	947.85	947.2
1319B-5	1,010.48	943.76	946.68	945.82	944.08	946.99	947.33	945.37	944.12	944.78	945.43	944.92	944.84	947.58	946.12	945.6
1338	994.24	943.21	945.06	945.19	943.13	944.99	944.72	944.27	943.49	943.71	943.67	943.78	943.99	944.53	944.26	944.1
1341	984.78	936.60	939.23	938.52	936.91	939.13	939.51	937.68	936.70	937.38	937.66	938.77	937.33	938.06	938.07	938.0
1345	988.97	933.41	936.33	935.29	933.85	936.17	936.85	934.66	933.66	934.21	934.61	934.24	934.31	934.89	934.92	934.8
1346	991.50	937.28	939.10	938.97	937.48	939.05	939.05	938.38	937.77	938.00	937.82	938.28	938.00	938.58	938.40	938.3
1382	997.40	--	--	--	937.74	939.30	939.40	938.76	938.04	938.10	938.05	938.60	938.19	938.60	938.60	938.5
1384	1,002.07	--	--	--	943.75	945.67	945.47	945.03	944.14	944.32	944.35	944.57	944.71	945.24	944.99	944.7
1386	993.83	--	--	--	939.09	940.58	940.45	939.89	939.28	939.58	939.38	939.63	939.55	940.13	939.93	939.8
1388	981.11	--	--	--	945.29	947.36	947.12	946.55	945.71	945.88	946.06	945.93	946.42	946.89	946.71	946.4
1390	987.84	--	--	--	941.55	943.16	943.75	942.47	941.82	942.08	941.99	942.04	942.14	942.73	942.60	942.4
1391	973.69	--	--	--	950.26	952.97	952.79	951.88	950.92	950.99	951.78	951.07	952.34	952.54	952.52	951.8
1392	987.43	--	--	--	936.07	937.58	937.72	936.82	936.22	936.43	936.38	936.67	936.51	936.98	936.82	936.7
1394	997.21	--	--	--	940.17	941.76	941.61	941.12	940.41	940.68	940.51	940.80	940.71	941.29	941.11	940.9

Table 2-12 - Revision 0
Western Alluvial Area and Sandstone B Groundwater Elevations
December 2012 Through May 2018

Well	Top of Casing Elevation Feet Above Mean Sea Level	Groundwater Elevation - Feet Above Mean Sea Level (North American Vertical Datum 1988)														
		December 2012	August 8, 2013	November 15, 2013	March 18, 2015	February 15, 2016	May 6, 2016	August 8, 2016	October 14, 2016	February 6, 2017	April 17, 2017	July 31, 2017	November 6, 2017	February 5, 2018	May 7, 2018	Mean
TRANSITION ZONE WELLS																
MWWA-03	947.53	930.94	934.31	932.45	931.50	938.00	938.64	932.03	932.03	931.28	934.24	931.93	932.08	932.70	934.03	933.3
MWWA-09	947.70	933.11	938.07	935.45	933.74	942.88	942.49	934.65	934.65	934.66	941.08	934.15	934.69	939.43	939.37	937.0

Notes:

-- indicates monitor well not yet installed

N/A - no data recorded

Table 3-1 - Revision 0
Representative Nitrate Concentrations
Western Area

Preparer: Ashley Anstaett; Date: 10/13/21
 Reviewer: E. Dulle; Date: 09/09/22

Monitor Well	Max Value (mg/L)	95% UCL (mg/L)	Well Average (mg/L)	Representative Concentration (mg/L)
1343	6.89	6.45	4.62	6.45
1311	44	--	--	21.6
1312	555	380	--	380
1313	464	240	--	240
1319A-2	33	--	31.9	31.9
1319B-1	85.5	57.4	--	57.4
1319B-2	2.68	2.70	--	2.68
1319B-3	90.1	75.8	--	75.8
1319B-4	3.77	3.70	--	3.70
1319B-5	13.1	11.3	--	11.3
1320	18.6	19.14	--	18.6
1322	19.4	--	19.4	19.4
1324	6.45	--	3.76	3.76
1325	20.5	--	19.7	19.7
1326	33.8	--	27.1	27.1
1327B	38.7	--	36.4	36.4
1329	33.0	--	31.4	31.4
1330	16.0	--	13.1	13.1
1331	10.1	--	10.1	10.1
1333	4.19	--	4.19	4.19
1334	6.81	--	5.83	5.83
1335A	2.77	--	2.50	2.50
1336A	414	377	--	377
1337	63.7	53.34	--	53.34
1338	10.50	--	7.01	7.01
1340	66.5	53.8	--	53.8
1341	29.3	28.6	--	28.6
1345	7.80	7.66	--	7.66
1346	499	407	--	407
1347	95.9	65.0	--	65.0
1348	70.7	11.6	--	11.6
1349	21.5	20.2	--	20.2
1350	15.6	--	11.7	11.7
1351	87.4	76.1	--	76.1
1352	66.3	55.0	--	55.0
1353	7.75	8.789	--	7.75
1354	190	142	--	142
1355	14.5	--	14.0	14.0
1356	18.8	14.8	--	14.8
1357	55.4	52.0	--	52.0

Table 3-1 - Revision 0
Representative Nitrate Concentrations
Western Area

Preparer: Ashley Anstaett; Date: 10/13/21
 Reviewer: E. Dulle; Date: 09/09/22

Monitor Well	Max Value (mg/L)	95% UCL (mg/L)	Well Average (mg/L)	Representative Concentration (mg/L)
1358	20.6	--	16.9	16.9
1359	23.1	--	21.7	21.7
1360	16.4	--	13.4	13.4
1375	37.9	--	34.3	34.3
1376	17.7	--	17.0	17.0
1377	8.73	--	8.73	8.73
1378	8.55	--	8.55	8.55
1379	7.37	--	7.37	7.37
1380	17.1	--	17.1	17.1
1381	925	839	--	839
1382	3.06	--	2.44	2.44
1383	308.0	--	226.7	226.7
1384	0.505	--	0.400	0.400
1385	6860	1006	--	1006
1386	17.6	--	15.4	15.4
1387	158.0	60.2	--	60.2
1388	10.4	--	9.15	9.15
1389	31.6	--	21.7	21.7
1390	7.03	--	4.89	4.89
1391	5.25	--	4.09	4.09
1392	1.56	--	1.11	1.11
1393	505	275	--	275
1394	5.14	--	4.25	4.25
1395	1.6	--	1.6	1.6
1396	17.5	--	17.5	17.5
1397	202	--	202	202
1398	0.748	--	0.748	0.748
1399	69.5	--	69.5	69.5
1400	104	--	104	104
1401	802	--	802	802
1402	217	--	217	217
1403	5.83	--	5.83	5.83
MWWA-03	84.6	42.4	--	42.4
MWWA-09	56.0	43.1	--	43.1
T-51	16.0	14.7	--	14.7
T-52	58.0	56.7	--	56.7
T-53	47.7	47.7	--	47.7
T-54	431	239	--	239
T-55	281	236	--	236
T-56	26.4	24.9	--	24.9

Table 3-1 - Revision 0
Representative Nitrate Concentrations
Western Area

Preparer: Ashley Anstaett; Date: 10/13/21
 Reviewer: E. Dulle; Date: 09/09/22

Monitor Well	Max Value (mg/L)	95% UCL (mg/L)	Well Average (mg/L)	Representative Concentration (mg/L)
T-57	136	112	--	112
T-58	61.0	44.9	--	44.9
T-59	150	112	--	112
T-60	101.0	97.4	--	97.4
T-61	56.8	34.9	--	34.9
T-62	153.0	88.0	--	88.0
T-63	150	139	--	139
T-64	20.7	14.0	--	14.0
T-65	55.5	56.7	--	55.5
T-66	40.3	40.73	--	40.3
T-67	29.4	27.0	--	27.0
T-68	21.4	21.2	--	21.2
T-69	140.0	72.1	--	72.1
T-70R	6.92	4.41	--	4.41
T-72	25.8	27.82	--	25.8
T-73	0.034	--	0.028	0.028
T-74	1.57	--	1.47	1.47
T-75	1.97	--	1.66	1.66
T-76	47.8	30.4	--	30.4
T-77	5.50	3.07	--	3.07
T-78	0.251	--	0.164	0.164
T-79	3.56	1.26	--	1.26
T-81	0.074	--	0.071	0.071
T-82	0.086	0.068	--	0.068
T-83	0.063	--	0.054	0.054
T-84	51.0	46.5	--	46.5
T-85	123	100	--	100
T-86	58.0	43.9	--	43.9
T-87	110	108	--	108
T-88	130.0	75.4	--	75.4
T-89	72.5	68.5	--	68.5
T-90	34.5	35.17	--	34.5
T-91	38.9	30.9	--	30.9
T-92R	40.5	--	36.3	36.3
T-93	58.5	54.5	--	54.5
T-94	18.9	18.7	--	18.7
T-95	49.0	49.2	--	49.0
T-96	50.5	31.6	--	31.6
T-97	14.0	10.2	--	10.2
T-98	2.000	--	0.862	0.862

**Table 3-1 - Revision 0
Representative Nitrate Concentrations
Western Area**

Preparer: Ashley Anstaett; Date: 10/13/21
Reviewer: E. Dulle; Date: 09/09/22

Monitor Well	Max Value (mg/L)	95% UCL (mg/L)	Well Average (mg/L)	Representative Concentration (mg/L)
T-99	46.6	37.4	--	37.4
T-100	51.6	39.5	--	39.5
T-101	36.5	--	27.2	27.2
T-102	24.4	--	22.3	22.3
T-103	8.64	--	4.02	4.02

Notes:

mg/L - milligrams per liter

UCL - Upper Confidence Limit

-Concentrations calculated for wells 1395 through 1403 used data available from Fourth Quarter 2017.

Table 3-2 - Revision 0
Representative Fluoride Concentrations
Western Area

Preparer: A. Anstaett; Date: 10/14/21
 Reviewer: E. Dulle; Date: 09/09/22

Monitor Well	Max Value (mg/L)	95% UCL (mg/L)	Well Average (mg/L)	Representative Concentration (mg/L)
1311	0.561	--	0.477	0.477
1312	22.400	10.460	--	10.460
1313	148	48.9	--	48.900
1319A-2	0.366	--	0.3415	0.342
1319B-1	0.348	0.337	--	0.337
1319B-2	0.455	0.447	--	0.447
1319B-3	0.314	0.307	--	0.307
1319B-4	0.424	0.412	--	0.412
1319B-5	0.430	0.403	--	0.403
1320	0.643	--	0.5750	0.575
1322	0.549	--	0.5490	0.549
1324	0.530	--	0.5153	0.515
1325	0.522	--	0.5055	0.506
1326	0.322	--	0.3130	0.313
1327B	0.348	--	0.3355	0.336
1329	0.480	--	0.4125	0.413
1330	0.629	--	0.6095	0.610
1331	0.557	--	0.5570	0.557
1333	0.705	--	0.7050	0.705
1334	0.602	--	0.5533	0.553
1335A	0.386	--	0.3577	0.358
1336A	9.890	9.627	--	9.627
1337	14.400	14.16	--	14.160
1338	0.879	0.878	--	0.878
1340	20.900	18	--	18.000
1341	0.687	0.645	--	0.645
1343	0.406	--	0.3950	0.395
1345	0.530	0.534	--	0.530
1346	11.400	9.641	--	9.641
1347	4.950	4.753	--	4.753
1348	9.770	8.858	--	8.858
1349	1.030	1.016	--	1.016
1350	1.590	--	1.5900	1.590
1351	1.280	1.063	--	1.063
1352	0.589	0.528	--	0.528
1353	1.720	1.795	--	1.720
1354	0.520	0.499	--	0.499
1355	0.439	--	0.4390	0.439
1356	0.981	0.739	--	0.739
1357	0.557	--	0.5555	0.556

Table 3-2 - Revision 0
Representative Fluoride Concentrations
Western Area

Preparer: A. Anstaett; Date: 10/14/21
 Reviewer: E. Dulle; Date: 09/09/22

Monitor Well	Max Value (mg/L)	95% UCL (mg/L)	Well Average (mg/L)	Representative Concentration (mg/L)
1358	0.335	--	0.3350	0.335
1359	0.973	--	0.9730	0.973
1360	1.600	--	1.6000	1.600
1375	0.386	--	0.3710	0.371
1376	0.713	--	0.5640	0.564
1377	0.464	--	0.4640	0.464
1378	0.281	--	0.2810	0.281
1379	0.754	--	0.7250	0.725
1380	0.505	--	0.5050	0.505
1381	2.120	--	1.648	1.648
1382	0.507	--	0.4817	0.482
1383	19.400	--	11.7633	11.763
1384	0.455	--	0.431	0.431
1385	10.60	7.65	--	7.65
1386	0.453	--	0.437	0.437
1387	9.80	8.21	--	8.21
1388	2.16	--	1.93	1.93
1389	0.211	--	0.175	0.175
1390	1.07	--	0.961	0.961
1391	3.430	--	2.853	2.853
1392	0.698	--	0.686	0.686
1393	21.30	11.89	--	11.89
1394	0.399	--	0.382	0.382
1395	0.405	--	0.405	0.405
1396	0.466	--	0.466	0.466
1397	12.50	--	12.50	12.50
1398	0.317	--	0.317	0.317
1399	0.448	--	0.448	0.448
1400	9.73	--	9.73	9.73
1401	7.03	--	7.03	7.03
1402	45	--	45	45
1403	32.3	--	32.3	32.3
MWWA-03	16.90	9.66	--	9.66
MWWA-09	4.50	3.97	--	3.97
T-51	0.452	--	0.4385	0.439
T-52	1.640	--	1.5400	1.54
T-53	0.934	--	0.8850	0.885
T-54	2.44	2.23	--	2.23
T-55	2.41	2.19	--	2.19
T-56	1.02	0.984	--	0.984

**Table 3-2 - Revision 0
Representative Fluoride Concentrations
Western Area**

Preparer: A. Anstaett; Date: 10/14/21
Reviewer: E. Dulle; Date: 09/09/22

Monitor Well	Max Value (mg/L)	95% UCL (mg/L)	Well Average (mg/L)	Representative Concentration (mg/L)
T-57	5.03	4.64	--	4.64
T-58	0.887	0.861	--	0.861
T-59	0.405	--	0.328	0.328
T-60	0.496	--	0.485	0.485
T-61	0.498	--	0.456	0.456
T-62	4.41	3.75	--	3.75
T-63	5.74	5.28	--	5.28
T-64	3.45	2.51	--	2.51
T-65	3.29	3.22	--	3.22
T-66	1.85	1.84	--	1.84
T-67	2.70	2.77	--	2.70
T-68	1.76	1.72	--	1.72
T-69	1.29	1.24	--	1.24
T-70R	1.44	1.33	--	1.33
T-72	1.42	1.40	--	1.40
T-73	0.320	--	0.320	0.320
T-74	0.329	--	0.329	0.329
T-75	0.895	--	0.844	0.844
T-76	3.01	2.93	--	2.93
T-77	1.22	1.09	--	1.09
T-78	0.365	--	0.365	0.365
T-79	1.00	0.898	--	0.898
T-81	0.415	--	0.415	0.415
T-82	0.585	0.493	--	0.493
T-83	0.397	--	0.397	0.397
T-84	0.800	--	0.790	0.790
T-85	1.49	--	1.45	1.45
T-86	3.17	3.03	--	3.03
T-87	1.30	1.28	--	1.28
T-88	1.37	1.26	--	1.26
T-89	0.559	--	0.505	0.505
T-90	0.737	--	0.707	0.707
T-91	0.622	--	0.584	0.584
T-92R	0.407	--	0.396	0.396
T-93	0.518	--	0.468	0.468
T-94	0.555	--	0.540	0.540
T-95	1.640	--	1.565	1.565
T-96	0.533	--	0.533	0.533
T-97	0.385	--	0.385	0.385
T-98	0.340	--	0.340	0.340

Table 3-2 - Revision 0
Representative Fluoride Concentrations
Western Area

Preparer: A. Anstaett; Date: 10/14/21
Reviewer: E. Dulle; Date: 09/09/22

Monitor Well	Max Value (mg/L)	95% UCL (mg/L)	Well Average (mg/L)	Representative Concentration (mg/L)
T-99	0.552	--	0.552	0.552
T-100	0.772	--	0.772	0.772
T-101	0.534	--	0.534	0.534
T-102	0.315	--	0.315	0.315
T-103	0.356	--	0.356	0.356

Notes:

mg/L - milligrams per liter

UCL - Upper Confidence Limit

-Concentrations calculated for wells 1395 through 1403 used data available from Fourth Quarter 2017.

Table 3-3 - Revision 0
Representative Uranium Concentrations
Western Area

Preparer: A. Anstaett; Date: 10/14/21
 Reviewer: E. Dulle; Date: 09/09/22

Monitor Well	Max Value (µg/L)	95% UCL (µg/L)	Well Average (µg/L)	Representative Concentration (µg/L)
1311	2.94	--	2.72	2.72
1312	22.3	22.1	--	22.1
1313	18.8	19.900	--	18.8
1319A-2	11.00	--	6.28	6.28
1319B-1	42.8	38.0	--	38.0
1319B-2	1.41	1.45	--	1.41
1319B-3	31.00	28.53	--	28.53
1319B-4	1.64	1.62	--	1.62
1319B-5	2.64	2.45	--	2.45
1320	2.23	2.20	--	2.20
1322	19.9	--	12.8	12.8
1324	1.76	--	1.62	1.62
1325	0.998	--	0.938	0.938
1326	5.50	--	4.20	4.20
1327B	4.42	--	4.10	4.10
1329	4.86	--	4.39	4.39
1330	6.11	--	5.65	5.65
1331	36.8	32.1	--	32.1
1333	21.7	--	21.0	21.0
1334	16.2	--	11.5	11.5
1335A	8.00	--	6.09	6.09
1336A	39.8	36.1	--	36.1
1337	7.02	6.69	--	6.69
1338	0.817	--	0.764	0.764
1340	8.98	8.46	--	8.46
1341	2.40	2.36	--	2.36
1343	21.90	21.28	--	21.28
1345	2.15	2.08	--	2.08
1346	6.99	5.46	--	5.46
1347	40.3	34.5	--	34.5
1348	77.9	71.3	--	71.3
1349	30.0	29.6	--	29.6
1350	19.4	--	14.3	14.3
1351	1,548	875	--	875
1352	149	125	--	125
1353	44.7	50.3	--	44.7
1354	3.11	3.05	--	3.05
1355	2.64	--	2.58	2.58
1356	1,260	572.4	--	572.4
1357	2.16	2.19	--	2.16

Table 3-3 - Revision 0
Representative Uranium Concentrations
Western Area

Preparer: A. Anstaett; Date: 10/14/21
 Reviewer: E. Dulle; Date: 09/09/22

Monitor Well	Max Value (µg/L)	95% UCL (µg/L)	Well Average (µg/L)	Representative Concentration (µg/L)
1358	1.74	--	1.57	1.57
1359	14.3	--	12.1	12.1
1360	39.3	--	23.9	23.9
1375	4.66	--	3.55	3.55
1376	27.1	--	15.4	15.4
1377	20.3	--	16.5	16.5
1378	2.43	--	2.25	2.25
1379	19.9	--	18.3	18.3
1380	11.1	--	10.5	10.5
1381	92.5	81.9	--	81.9
1382	1.27	--	1.26	1.26
1383	13.5	--	10.0	10.0
1384	0.655	--	0.635	0.635
1385	20.40	--	19.0	19.0
1386	1.30	--	1.23	1.23
1387	23.7	--	20.4	20.4
1388	1.42	--	1.35	1.35
1389	2.26	--	1.40	1.40
1390	1.54	--	1.54	1.54
1391	1.78	--	1.66	1.66
1392	1.05	--	1.05	1.05
1393	35.0	24.2	--	24.2
1394	1.01	--	1.00	1.00
1395	2.31	--	2.31	2.31
1396	7.17	--	7.170	7.17
1397	12.9	--	12.90	12.90
1398	1.0	--	0.990	0.99
1399	4.4	--	4.350	4.35
1400	2.77	--	2.77	2.77
1401	65.7	--	65.7	65.7
1402	4.05	--	4.05	4.05
1403	1.7	--	1.7	1.7
MWWA-03	666	527	--	527
MWWA-09	156	140	--	140
T-51	36.8	36.4	--	36.4
T-52	23.5	23.2	--	23.2
T-53	33.6	34.4	--	33.6
T-54	4.07	3.79	--	3.79
T-55	8.51	7.39	--	7.39
T-56	7.41	5.77	--	5.77

Table 3-3 - Revision 0
Representative Uranium Concentrations
Western Area

Preparer: A. Anstaett; Date: 10/14/21
 Reviewer: E. Dulle; Date: 09/09/22

Monitor Well	Max Value (µg/L)	95% UCL (µg/L)	Well Average (µg/L)	Representative Concentration (µg/L)
T-57	14.5	13.6	--	13.6
T-58	20.4	19.9	--	19.9
T-59	101.0	92.3	--	92.3
T-60	50.1	48.6	--	48.6
T-61	35.0	30.4	--	30.4
T-62	238	178	--	178
T-63	104	105	--	104
T-64	208	126	--	126
T-65	156	152	--	152
T-66	123	122	--	122
T-67	159	160	--	159
T-68	162	150	--	150
T-69	92.3	77.3	--	77.3
T-70R	119	97.7	--	97.7
T-72	142	141	--	141
T-73	11.9	--	--	10.4
T-74	16.1	--	--	13.8
T-75	86.4	--	--	76.7
T-76	194	173	--	173
T-77	95.8	86.8	--	86.8
T-78	21.8	--	17.5	17.5
T-79	77.00	62.76	--	62.76
T-81	12.7	--	11.0	11.0
T-82	37.6	34.3	--	34.3
T-83	15.1	--	14.3	14.3
T-84	48.1	48.6	--	48.1
T-85	27.8	28.1	--	27.8
T-86	25.4	22.9	--	22.9
T-87	24.1	22.0	--	22.0
T-88	10.79	9.94	--	9.94
T-89	52.1	50.7	--	50.7
T-90	25.0	24.8	--	24.8
T-91	28.0	27.8	--	27.8
T-92R	43.9	--	38.3	38.3
T-93	33.5	32.7	--	32.7
T-94	20.2	20.9	--	20.2
T-95	29.5	29.3	--	29.3
T-96	36.1	34.7	--	34.7
T-97	72.2	64.1	--	64.1
T-98	63.3	--	53.1	53.1

Table 3-3 - Revision 0
Representative Uranium Concentrations
Western Area

Preparer: A. Anstaett; Date: 10/14/21
 Reviewer: E. Dulle; Date: 09/09/22

Monitor Well	Max Value (µg/L)	95% UCL (µg/L)	Well Average (µg/L)	Representative Concentration (µg/L)
T-99	48.1	42.1	--	42.1
T-100	31.6	--	29.1	29.1
T-101	36.0	--	34.8	34.8
T-102	33.2	--	32.3	32.3
T-103	11.1	--	10.2	10.2

Notes:

µg/L - milligrams per liter

UCL - Upper Confidence Limit

-Concentrations calculated for wells 1395 through 1403 used data available from Fourth Quarter 2017.

Table 3-4 - Revision 0
Representative Uranium Concentrations
Burial Area #1

Preparer: A. Anstaett; Date: 10/14/21
 Reviewer: E. Dulle; Date: 09/09/22

Monitor Well	Max Value (µg/L)	95% UCL (µg/L)	Well Average (µg/L)	Representative Concentration (µg/L)
1314	1.35	1.27	--	1.27
1344	2.36	--	1.96	1.96
1361	271	173	--	173
1362	77.7	--	40.2	40.2
1363	104	111	--	104
1364	15.90	--	7.16	7.16
1365	123	101	--	101
1366	5.98	5.54	--	5.54
1367	13.10	--	8.34	8.34
1368	8.64	--	5.89	5.89
1369	38.9	--	20.6	20.6
1370	15.50	--	7.25	7.25
1371	31.3	--	27.9	27.9
1372	10.50	--	9.36	9.36
1373	64.3	51.2	--	51.2
02W01	2,720	2,495	--	2,495
02W02	2,346	--	2,128	2,128
02W03	1,190	--	862	862
02W04	497	--	301	301
02W05	638	--	388	388
02W06	1,950	1,310	--	1,310
02W07	1,478	--	924	924
02W08	744	429	--	429
02W09	9.95	6.97	--	6.97
02W10	4.37	--	3.99	3.99
02W11	311	--	136	136
02W12	448	--	203	203
02W13	33.8	--	28.4	28.4
02W14	306	--	279	279
02W15	261	--	101	101
02W16	20.2	17.4	--	17.4
02W17	15.7	13.9	--	13.9
02W18	504	--	289	289
02W19	1,306	--	712	712
02W20	1.55	--	1.24	1.24
02W21	5.54	--	5.49	5.49
02W22	10.50	--	8.63	8.63
02W23	7.37	--	7.24	7.24
02W24	15.7	--	13.3	13.3
02W25	28.4	--	19.0	19.0

Table 3-4 - Revision 0
Representative Uranium Concentrations
Burial Area #1

Preparer: A. Anstaett; Date: 10/14/21
 Reviewer: E. Dulle; Date: 09/09/22

Monitor Well	Max Value (µg/L)	95% UCL (µg/L)	Well Average (µg/L)	Representative Concentration (µg/L)
02W26	7.10	--	4.04	4.04
02W27	188	135	--	135
02W28	428	353	--	353
02W29	1,570	--	1,115	1,115
02W30	338	--	310	310
02W31	997	--	861	861
02W32	3,410	1,577	--	1,577
02W33	31.1	--	17.4	17.4
02W34	5.61	--	4.97	4.97
02W35	29.3	24.5	--	24.5
02W36	18.6	--	15.2	15.2
02W37	789	--	333	333
02W38	392	--	255	255
02W39	851	613	--	613
02W40	1,430	1,137	--	1,137
02W41	517	--	421	421
02W42	516	408	--	408
02W43	134	124	--	124
02W44	945	506	--	506
02W45	62.4	--	48.6	48.6
02W46	4,330	--	2,663	2,663
02W47	342	--	264	264
02W50	3.99	--	3.85	3.85
02W51	4.56	--	4.52	4.52
02W52	2.49	--	2.28	2.28
02W53	63.6	--	41.6	41.6
02W62	5.55	--	5.07	5.07
1315R	1,510	1,103	--	1,103
1316R	144	--	137	137
TMW-01	767	--	463	463
TMW-02	5.40	--	3.76	3.76
TMW-05	3.87	--	3.58	3.58
TMW-06	2.41	--	2.26	2.26
TMW-07	221	--	210	210
TMW-08	3,230	2,589	--	2,589
TMW-09	3,760	2,975	--	2,975
TMW-13	4,510	3,516	--	3,516
TMW-18	17.2	--	14.8	14.8
TMW-20	8.92	--	6.40	6.40
TMW-21	96.6	--	62.4	62.4

Table 3-4 - Revision 0
Representative Uranium Concentrations
Burial Area #1

Preparer: A. Anstaett; Date: 10/14/21
Reviewer: E. Dulle; Date: 09/09/22

Monitor Well	Max Value (µg/L)	95% UCL (µg/L)	Well Average (µg/L)	Representative Concentration (µg/L)
TMW-24	82.3	68.3	--	68.3
TMW-25	123	--	116	116

Notes:

µg/L - milligrams per liter

UCL - Upper Confidence Limit

Table 3-5 - Revision 0
Surface Water Concentrations
Location 1201

Preparer: J. Lux Date: 8/10/22

Reviewer: B. Brittain

Date: 8/26/22

Date	Analyte	Result	Total Uranium	Detection Limit	Reporting Limit	Unit	Qual
6/1/1990	Uranium-234	4.210				pci/L	
	Uranium-235	0.033				pci/L	
	Uranium-238	3.610	7.85			pci/L	
6/13/1995	Uranium-234	0.600				pci/L	
	Uranium-235	0.300		0.300	0.300	pci/L	U
	Uranium-238	0.300	1.20			pci/L	
5/1/1996	Uranium-234	3.630				pci/L	
	Uranium-235	0.370				pci/L	
	Uranium-238	2.660	6.66			pci/L	
6/12/1997	Uranium-234	5.500				pci/L	
	Uranium-235	0.400		0.400	0.400	pci/L	U
	Uranium-238	2.500	8.40			pci/L	
5/26/1998	Uranium-234	4.200				pci/L	
	Uranium-235	0.600				pci/L	
	Uranium-238	2.700	7.50			pci/L	
6/28/1999	Uranium-234	2.100				pci/L	
	Uranium-235	0.300		0.300	0.300	pci/L	U
	Uranium-238	1.200	3.60			pci/L	
7/5/2000	Uranium-234	2.820				pci/L	
	Uranium-235	0.135				pci/L	
	Uranium-238	1.950	4.91			pci/L	
6/25/2001	Uranium-234	2.460				pci/L	
	Uranium-235	0.115				pci/L	
	Uranium-238	1.910	4.49			pci/L	
6/27/2002	Uranium-234	1.940				pci/L	
	Uranium-235	0.230				pci/L	
	Uranium-238	1.330	3.50			pci/L	
6/23/2003	Uranium-234	1.520				pci/L	
	Uranium-235	0.125				pci/L	
	Uranium-238	0.883	2.53			pci/L	
8/26/2004	Uranium-234	2.110			0.09	pci/L	
	Uranium-235	0.169			0.05	pci/L	
	Uranium-238	1.560	3.84		0.02	pci/L	

Table 3-5 - Revision 0
Surface Water Concentrations
Location 1201

Preparer: J. Lux Date: 8/10/22

Reviewer: B. Brittain

Date: 8/26/22

Date	Analyte	Result	Total Uranium	Detection Limit	Reporting Limit	Unit	Qual
5/24/2005	Uranium-234	3.220		0.100	0.85	pci/L	J
	Uranium-235	0.100		0.100	0.72	pci/L	UJ
	Uranium-238	2.260	5.58	0.100	0.66	pci/L	J
5/24/2006	Uranium-234	2.070		0.100	0.09	pci/L	
	Uranium-235	0.181		0.100	0.12	pci/L	
	Uranium-238	1.600	3.85	0.100	0.09	pci/L	
6/1/2009	Uranium-234	3.690		0.100	0.17	pci/L	J
	Uranium-235	0.176		0.100	0.13	pci/L	J
	Uranium-238	2.780	6.65	0.100	0.06	pci/L	J
10/18/2010	Uranium-234	1.120		0.100	0.11	pci/L	
	Uranium-235	0.100		0.100	0.03	pci/L	UJ
	Uranium-238	0.968	2.19	0.100	0.09	pci/L	
	Uranium-234	2.030		0.100	0.11	pci/L	J-
	Uranium-235	0.146		0.100	0.03	pci/L	
	Uranium-238	1.230	3.41	0.100	0.09	pci/L	J-
8/17/2011	Uranium-234	1.350		0.100	0.51	pci/L	
	Uranium-235	0.100		0.100	0.50	pci/L	U
	Uranium-238	1.010	2.46	0.100	0.59	pci/L	
8/1/2012	Uranium-234	0.379		1.000	0.38	pci/L	
	Uranium-235	1.000		1.000	0.09	pci/L	U
	Uranium-238	0.203	1.58	1.000	0.19	pci/L	
5/14/2013	Uranium-234	2.550		1.000	0.39	pci/L	
	Uranium-235	1.000		1.000	0.30	pci/L	U
	Uranium-238	1.750	5.30	1.000	0.39	pci/L	
5/28/2014	Uranium-234	5.210		1.000	0.56	pci/L	
	Uranium-235	1.000		1.000	0.47	pci/L	U
	Uranium-238	2.570	8.78	0.200	0.07	pci/L	
3/27/2015	Uranium-234	2.380		1.000	0.51	pci/L	
	Uranium-235	1.000		1.000	0.55	pci/L	U
	Uranium-238	1.760	5.14	0.200	0.07	pci/L	
5/11/2016	Uranium-234	4.360		1.000	0.26	pci/L	
	Uranium-235	0.518		1.000	0.32	pci/L	
	Uranium-238	2.740	7.62	0.200	0.07	pci/L	

Table 3-5 - Revision 0
Surface Water Concentrations
Location 1201

Preparer: J. Lux Date: 8/10/22

Reviewer: B. Brittain

Date: 8/26/22

Date	Analyte	Result	Total Uranium	Detection Limit	Reporting Limit	Unit	Qual
6/13/2018	Uranium-234	1.280		1.000	1.18	pci/L	
	Uranium-235	1.000		0.070	0.01	pci/L	U
	Uranium-238	1.210	3.49	0.200	0.07	pci/L	
8/27/2019	Uranium-234	1.640		0.615	1.00	pci/L	
	Uranium-235	0.024		0.514	1.00	pci/L	U
	Uranium-238	1.300	2.96	0.550	1.00	pci/L	
7/23/2020	Uranium-234	2.930		0.610	1.00	pci/L	
	Uranium-235	1.000		0.403	1.00	pci/L	U
	Uranium-238	1.370	5.30	0.360	1.00	pci/L	
7/7/2021	Uranium-234	2.740		1.090	0.91	pci/L	
	Uranium-235	-0.028		0.245	0.57	pci/L	U
	Uranium-238	1.610	4.32	0.876	0.91	pci/L	
7/12/2022	Uranium-234	1.860		0.896	1.00	pci/L	
	Uranium-235	0.059		0.624	1.00	pci/L	U
	Uranium-238	1.490	3.41	0.706	1.00	pci/L	

For All Upstream Sample Results	
Mean	4.69
Maximum	8.78
Standard Deviation	2.11
Mean + 2σ	8.91

Table 3-6 - Revision 0
Background Groundwater Concentrations
Sandstone A

Preparer: J. Lux Date: 8/10/22

Reviewer: B. Brittain

Date: 08/29/22

Monitor Well	Date	Analyte	Result	Total Uranium	Detection Limit	Reporting Limit	Unit	Qual
1325	3/1/1989	Uranium-234	1.490				pci/L	
		Uranium-235	0.046				pci/L	
		Uranium-238	1.000	2.54			pci/L	
	10/1/1989	Uranium-234	1.630				pci/L	
		Uranium-235	0.028				pci/L	
		Uranium-238	0.820	2.48			pci/L	
	6/1/1990	Uranium-234	1.750				pci/L	
		Uranium-235	0.094				pci/L	
		Uranium-238	0.640	2.48			pci/L	
	6/14/1995	Uranium-234	10.300				pci/L	
		Uranium-235	0.600				pci/L	
		Uranium-238	3.400	14.30			pci/L	
	4/30/1996	Uranium-234	1.080				pci/L	
		Uranium-235	0.096				pci/L	
		Uranium-238	0.490	1.67			pci/L	
	6/10/1997	Uranium-234	0.900				pci/L	
		Uranium-235	0.200		0.200	0.200	pci/L	U
		Uranium-238	0.300	1.40			pci/L	
	5/29/1998	Uranium-234	0.900				pci/L	
		Uranium-235	0.200		0.200	0.200	pci/L	U
		Uranium-238	0.500	1.60			pci/L	
	6/23/1999	Uranium-234	0.922				pci/L	J
		Uranium-235	0.255			0.255	pci/L	U
		Uranium-238	0.327	1.50			pci/L	J
	6/24/1999	Uranium-234	0.900				pci/L	
		Uranium-235	0.100				pci/L	
		Uranium-238	0.600	1.60			pci/L	
	6/30/2000	Uranium-234	0.800				pci/L	
		Uranium-235	0.189		0.189	0.189	pci/L	U
		Uranium-238	0.292	1.28			pci/L	
6/27/2001	Uranium-234	0.707				pci/L		
	Uranium-235	0.036				pci/L		
	Uranium-238	0.310	1.05			pci/L		
6/26/2002	Uranium-234	0.963				pci/L		
	Uranium-235	0.150				pci/L		
	Uranium-238	0.392	1.51			pci/L		
6/23/2003	Uranium-234	0.924				pci/L		
	Uranium-235	0.088			0.088	pci/L	U	
	Uranium-238	0.308	1.32			pci/L		
8/26/2004	Uranium-234	0.754			0.084	pci/L		
	Uranium-235	0.093			0.055	pci/L		
	Uranium-238	0.364	1.21	0.055		pci/L		

Table 3-6 - Revision 0
Background Groundwater Concentrations
Sandstone A

Preparer: J. Lux Date: 8/10/22

Reviewer: B. Brittain

Date: 08/29/22

Monitor Well	Date	Analyte	Result	Total Uranium	Detection Limit	Reporting Limit	Unit	Qual
1325	5/24/2005	Uranium-234	0.846		0.071	0.100	pci/L	
		Uranium-235	0.045		0.019	0.100	pci/L	J
		Uranium-238	0.433	1.32	0.019	0.100	pci/L	
	5/24/2006	Uranium-234	0.593		0.097	0.100	pci/L	J
		Uranium-235	0.100		0.100	0.100	pci/L	U
		Uranium-238	0.328	1.02	0.124	0.100	pci/L	J
	8/15/2007	Uranium-234	0.687		0.063	0.100	pci/L	
		Uranium-235	0.054		0.027	0.100	pci/L	
		Uranium-238	0.268	1.01	0.022	0.100	pci/L	
	6/25/2008	Uranium-234	0.846		0.039	0.100	pci/L	
		Uranium-235	0.100		0.048	0.100	pci/L	U
		Uranium-238	0.297	1.24	0.048	0.100	pci/L	
10/25/2010	Uranium-234	0.618		0.205	0.100	pci/L	J-	
	Uranium-235	0.100		0.202	0.100	pci/L	UJ	
	Uranium-238	0.299	1.02	0.164	0.100	pci/L	J-	
1335	3/1/1989	Uranium-234	1.640				pci/L	
		Uranium-235	0.100				pci/L	
		Uranium-238	1.250	2.99			pci/L	
	10/1/1989	Uranium-234	2.140				pci/L	
		Uranium-235	0.023				pci/L	
		Uranium-238	1.520	3.68			pci/L	
	6/1/1990	Uranium-234	1.220				pci/L	
		Uranium-235	0.022				pci/L	
		Uranium-238	0.740	1.98			pci/L	
	6/12/1995	Uranium-234	0.600				pci/L	
		Uranium-235	0.300		0.300	0.300	pci/L	U
		Uranium-238	0.300	1.20			pci/L	
4/30/1996	Uranium-234	1.030				pci/L		
	Uranium-235	0.069				pci/L		
	Uranium-238	0.620	1.72			pci/L		
1335A	10/17/1996	Uranium-234	0.700				pci/L	
		Uranium-235	0.100				pci/L	
		Uranium-238	0.500	1.30			pci/L	
	6/10/1997	Uranium-234	1.600				pci/L	
		Uranium-235	0.200		0.200	0.200	pci/L	U
		Uranium-238	0.700	2.50			pci/L	
	6/17/1998	Uranium-234	1.400				pci/L	
		Uranium-235	0.300		0.300	0.300	pci/L	U
		Uranium-238	0.600	2.30			pci/L	
6/24/1999	Uranium-234	1.500				pci/L		
	Uranium-235	0.100				pci/L		
	Uranium-238	0.500	2.10			pci/L		

Table 3-6 - Revision 0
Background Groundwater Concentrations
Sandstone A

Preparer: J. Lux Date: 8/10/22

Reviewer: B. Brittain

Date: 08/29/22

Monitor Well	Date	Analyte	Result	Total Uranium	Detection Limit	Reporting Limit	Unit	Qual	
1335A	7/5/2000	Uranium-234	0.896				pci/L		
		Uranium-235	0.159		0.159	0.159	pci/L	U	
		Uranium-238	0.657	1.71			pci/L		
	6/27/2001	Uranium-234	0.985				pci/L		
		Uranium-235	0.049			0.049	pci/L	U	
		Uranium-238	0.583	1.62			pci/L		
	6/26/2002	Uranium-234	3.260				pci/L		
		Uranium-235	0.974			0.974	pci/L	U	
		Uranium-238	0.971	5.21		0.971	pci/L	U	
	6/23/2003	Uranium-234	0.741				pci/L		
		Uranium-235	0.079			0.079	pci/L	U	
		Uranium-238	0.492	1.31			pci/L		
	8/26/2004	Uranium-234	1.040			0.074	pci/L		
		Uranium-235	0.162			0.065	pci/L		
		Uranium-238	0.467	1.67		0.065	pci/L		
	5/24/2005	Uranium-234	1.040			0.048	0.100	pci/L	
		Uranium-235	0.146			0.039	0.100	pci/L	J
		Uranium-238	0.515	1.70		0.048	0.100	pci/L	
	5/24/2006	Uranium-234	0.851			0.051	0.100	pci/L	
		Uranium-235	0.100			0.063	0.100	pci/L	U
		Uranium-238	0.594	1.55		0.063	0.100	pci/L	
	8/15/2007	Uranium-234	0.859			0.073	0.100	pci/L	
		Uranium-235	0.100			0.067	0.100	pci/L	U
		Uranium-238	0.536	1.50		0.045	0.100	pci/L	
	6/24/2008	Uranium-234	0.864			0.074	0.100	pci/L	
		Uranium-235	0.100			0.048	0.100	pci/L	U
		Uranium-238	0.465	1.43		0.049	0.100	pci/L	
	10/25/2010	Uranium-234	1.120			0.177	0.100	pci/L	
		Uranium-235	0.099			0.059	0.100	pci/L	J
		Uranium-238	0.847	2.07		0.122	0.100	pci/L	

For Both Background Monitor Wells	
Mean	2.13
Maximum	14.30
Standard Deviation	2.18
Mean + 2σ	6.50
For Both Background Monitor Wells (w/o 6/14/1995 data for Monitor Well 1325)	
Mean	1.80
Maximum	5.21
Standard Deviation	0.82
Mean + 2σ	3.45

Table 3-7 - Revision 0
Background Groundwater Concentrations
Sandstone B

Preparer: J. Lux Date: 8/10/22

Reviewer: B. Brittain

Date: 8/29/22

Monitor Well	Date	Analyte	Result	Total Uranium	Detection Limit	Reporting Limit	Unit	Qual	
1314	3/1/1989	Uranium-234	0.770				pci/L		
		Uranium-235	0.039				pci/L		
		Uranium-238	0.310	1.12			pci/L		
	10/1/1989	Uranium-234	1.470				pci/L		
		Uranium-235	0.027				pci/L		
		Uranium-238	0.480	1.98			pci/L		
	6/1/1990	Uranium-234	1.610				pci/L		
		Uranium-235	0.022				pci/L		
		Uranium-238	0.690	2.32			pci/L		
	4/29/1996	Uranium-234	1.240				pci/L		
		Uranium-235	0.012				pci/L		
		Uranium-238	0.560	1.81			pci/L		
	6/5/1997	Uranium-234	1.300				pci/L		
		Uranium-235	0.100				pci/L		
		Uranium-238	0.600	2.00			pci/L		
	6/19/1998	Uranium-234	1.800				pci/L		
		Uranium-235	0.100				pci/L		
		Uranium-238	0.800	2.70			pci/L		
	6/23/1999	Uranium-234	1.800				pci/L		
		Uranium-235	0.300				pci/L		
		Uranium-238	0.700	2.80			pci/L		
	6/29/2000	Uranium-234	1.100				pci/L		
		Uranium-235	0.139			0.139	0.139	pci/L	U
		Uranium-238	0.316	1.56			pci/L		
	6/29/2001	Uranium-234	0.893				pci/L		
		Uranium-235	0.042				0.042	pci/L	U
		Uranium-238	0.382	1.32			pci/L		
6/25/2002	Uranium-234	1.160				pci/L			
	Uranium-235	0.143				pci/L			
	Uranium-238	0.354	1.66			pci/L			
8/26/2002	Uranium-234	1.240				pci/L			
	Uranium-235	0.272				0.272	pci/L	U	
	Uranium-238	0.519	2.03			pci/L			
6/23/2003	Uranium-234	1.310				pci/L			
	Uranium-235	0.122				pci/L			
	Uranium-238	0.496	1.93			pci/L			

Table 3-7 - Revision 0
Background Groundwater Concentrations
Sandstone B

Preparer: J. Lux Date: 8/10/22

Reviewer: B. Brittain

Date: 8/29/22

Monitor Well	Date	Analyte	Result	Total Uranium	Detection Limit	Reporting Limit	Unit	Qual
1314	8/30/2004	Uranium-234	1.040		0.062		pci/L	J
		Uranium-235	0.263		0.076		pci/L	J
		Uranium-238	0.479	1.78	0.080		pci/L	J
	5/31/2005	Uranium-234	1.280		0.240	0.100	pci/L	
		Uranium-235	0.100		0.120	0.100	pci/L	U
		Uranium-238	0.407	1.79	0.120	0.100	pci/L	
	5/24/2006	Uranium-234	1.190		0.086	0.100	pci/L	J
		Uranium-235	0.100		0.073	0.100	pci/L	U
		Uranium-238	0.424	1.71	0.059	0.100	pci/L	J
	8/15/2007	Uranium-234	1.000		1.450	1.000	pci/L	U
		Uranium-235	1.000		1.440	1.000	pci/L	UJ
		Uranium-238	1.000	3.00	1.160	1.000	pci/L	U
	8/16/2007	Uranium-234	1.270		0.053	0.100	pci/L	
		Uranium-235	0.053		0.048	0.100	pci/L	
		Uranium-238	0.574	1.90	0.047	0.100	pci/L	
	6/25/2008	Uranium-234	0.917		0.047	0.100	pci/L	
		Uranium-235	0.100		0.047	0.100	pci/L	U
		Uranium-238	0.409	1.43	0.047	0.100	pci/L	
	5/28/2009	Uranium-234	0.986		0.076	0.100	pci/L	
		Uranium-235	0.067		0.040	0.100	pci/L	
		Uranium-238	0.351	1.40	0.094	0.100	pci/L	
	10/27/2010	Uranium-234	0.914		0.061	0.100	pci/L	
		Uranium-235	0.071		0.024	0.100	pci/L	
		Uranium-238	0.331	1.32	0.019	0.100	pci/L	
	8/16/2011	Uranium-234	1.010		0.089	0.100	pci/L	
		Uranium-235	0.100		0.075	0.100	pci/L	UJ
		Uranium-238	0.334	1.44	0.078	0.100	pci/L	
8/1/2012	Uranium-234	0.796		0.582	1.000	pci/L		
	Uranium-235	1.000		0.437	1.000	pci/L	U	
	Uranium-238	1.000	2.80	0.252	1.000	pci/L	U	
5/14/2013	Uranium-234	0.928		0.546	1.000	pci/L		
	Uranium-235	1.000		0.438	1.000	pci/L	U	
	Uranium-238	0.499	2.43	0.354	1.000	pci/L		
5/28/2014	Uranium-234	0.987		0.558	1.000	pci/L		
	Uranium-235	1.000		0.320	1.000	pci/L	U	
	Uranium-238	0.551	2.54	0.067	0.200	pci/L		

Table 3-7 - Revision 0
Background Groundwater Concentrations
Sandstone B

Preparer: J. Lux Date: 8/10/22

Reviewer: B. Brittain

Date: 8/29/22

Monitor Well	Date	Analyte	Result	Total Uranium	Detection Limit	Reporting Limit	Unit	Qual
1314	3/25/2015	Uranium-234	0.891		0.532	1.000	pci/L	
		Uranium-235	1.000		0.448	1.000	pci/L	U
		Uranium-238	0.465	2.36	0.067	0.200	pci/L	
	5/10/2016	Uranium-235	1.000		0.230	1.000	pci/L	U
		Uranium-238	0.666		0.067	0.200	pci/L	
		Uranium-234	1.610	3.28	0.500	1.000	pci/L	
	5/2/2017	Uranium-238	0.870		0.067	0.200	pci/L	
		Uranium-235	1.010		0.010	0.070	pci/L	
		Uranium-234	1.760	3.64	0.424	1.000	pci/L	
	6/13/2018	Uranium-235	1.000		0.010	0.070	pci/L	U
		Uranium-238	0.566		0.067	0.200	pci/L	
		Uranium-234	1.310	2.88	0.652	1.000	pci/L	
	8/27/2019	Uranium-235	0.150		0.409	1.000	pci/L	U
		Uranium-238	0.519		0.382	1.000	pci/L	
		Uranium-234	1.250	1.92	0.623	1.000	pci/L	
	7/22/2020	Uranium-235	1.000		0.493	1.000	pci/L	U
		Uranium-234	0.892		0.627	1.000	pci/L	
		Uranium-238	0.452	2.34	0.440	1.000	pci/L	
	7/6/2021	Uranium-234	1.190		0.550	1.000	pci/L	
		Uranium-235	0.000		0.309	1.000	pci/L	
		Uranium-238	0.337	1.53	0.640	1.000	pci/L	
7/14/2022	Uranium-234	1.130		0.426	1.000	pci/L		
	Uranium-235	0.162		0.335	1.000	pci/L	U	
	Uranium-238	0.534	1.83	0.317	1.000	pci/L		
02W52	8/26/2002	Uranium-234	2.240				pci/L	
		Uranium-235	0.269			0.269	pci/L	U
		Uranium-238	1.580	4.09			pci/L	
	9/8/2004	Uranium-234	1.130		0.127		pci/L	
		Uranium-235	0.148		0.089		pci/L	
		Uranium-238	0.668	1.95	0.089		pci/L	
	5/21/2013	Uranium-234	1.510		0.697	1.000	pci/L	
		Uranium-235	1.000		0.781	1.000	pci/L	U
		Uranium-238	0.456	2.97	0.342	1.000	pci/L	
	3/25/2015	Uranium-234	1.370		0.350	1.000	pci/L	
		Uranium-235	1.000		0.351	1.000	pci/L	U
		Uranium-238	0.622	2.99	0.067	0.200	pci/L	

Table 3-7 - Revision 0
Background Groundwater Concentrations
Sandstone B

Preparer: J. Lux Date: 8/10/22

Reviewer: B. Brittain

Date: 8/29/22

Monitor Well	Date	Analyte	Result	Total Uranium	Detection Limit	Reporting Limit	Unit	Qual
1391	12/19/2014	Uranium-234	0.896		0.304	0.264	pci/L	
		Uranium-235	1.000		0.156	0.281	pci/L	U
		Uranium-238	0.509	2.41	0.235	0.067	pci/L	
1319B-2	5/16/2013	Uranium-234	1.560		0.667	0.446	pci/L	
		Uranium-235	1.000		0.242	0.463	pci/L	U
		Uranium-238	0.747	3.307	0.484	0.446	pci/L	
	9/24/2003	Uranium-234	1.130		0.238		pci/L	
		Uranium-235	0.105		0.062		pci/L	U
		Uranium-238	0.293	1.528	0.109		pci/L	
	6/26/2003	Uranium-234	1.400		0.233		pci/L	
		Uranium-235	0.084		0.057		pci/L	U
		Uranium-238	0.379	1.863	0.113		pci/L	

For All Four Background Monitor Wells		
Mean		2.19
Maximum		4.09
Standard Deviation		0.70
Mean + 2σ		3.59

Table 3-8 - Revision 0
Background Groundwater Concentrations
Sandstone C

Preparer: J. Lux Date: 8/10/22

Reviewer: B. Brittain

Date: 8/29/22

Monitor Well	Date	Analyte	Result	Total Uranium	Detection Limit	Reporting Limit	Unit	Qual
1328	3/1/1989	Uranium-234	18.000				pci/L	
		Uranium-235	0.660				pci/L	
		Uranium-238	9.000	27.66			pci/L	
	10/1/1989	Uranium-234	28.200				pci/L	
		Uranium-235	0.370				pci/L	
		Uranium-238	15.100	43.67			pci/L	
	6/1/1990	Uranium-234	25.000				pci/L	
		Uranium-235	0.410				pci/L	
		Uranium-238	14.000	39.41			pci/L	
	6/1/1991	Uranium-234	21.000				pci/L	
		Uranium-235	0.510				pci/L	
		Uranium-238	11.200	32.71			pci/L	
	6/1/1992	Uranium-234	21.790				pci/L	
		Uranium-235	0.490				pci/L	
		Uranium-238	10.580	32.86			pci/L	
	6/1/1993	Uranium-234	18.900				pci/L	
		Uranium-235	1.800				pci/L	
		Uranium-238	11.300	32.00			pci/L	
	6/21/1994	Uranium-234	21.500				pci/L	
		Uranium-235	0.800				pci/L	
		Uranium-238	11.100	33.40			pci/L	
	6/21/1995	Uranium-234	19.600				pci/L	
		Uranium-235	1.300				pci/L	
		Uranium-238	10.200	31.10			pci/L	
	4/30/1996	Uranium-234	23.100				pci/L	
		Uranium-235	0.770				pci/L	
		Uranium-238	11.590	35.46			pci/L	
6/16/1997	Uranium-234	20.700				pci/L		
	Uranium-235	0.500				pci/L		
	Uranium-238	10.500	31.70			pci/L		
5/28/1998	Uranium-234	22.100				pci/L		
	Uranium-235	2.000				pci/L		
	Uranium-238	8.000	32.10			pci/L		
6/22/1999	Uranium-234	20.200				pci/L		
	Uranium-235	0.700				pci/L		
	Uranium-238	11.200	32.10			pci/L		

Table 3-8 - Revision 0
Background Groundwater Concentrations
Sandstone C

Preparer: J. Lux Date: 8/10/22

Reviewer: B. Brittain

Date: 8/29/22

Monitor Well	Date	Analyte	Result	Total Uranium	Detection Limit	Reporting Limit	Unit	Qual
1328	6/28/2000	Uranium-234	20.100				pci/L	
		Uranium-235	0.528				pci/L	
		Uranium-238	10.300	30.93			pci/L	
	6/28/2001	Uranium-234	18.800				pci/L	
		Uranium-235	1.010				pci/L	
		Uranium-238	10.400	30.21			pci/L	
	6/24/2002	Uranium-234	19.000				pci/L	
		Uranium-235	1.410				pci/L	
		Uranium-238	9.970	30.38			pci/L	
	6/26/2003	Uranium-234	21.600				pci/L	
		Uranium-235	1.110				pci/L	
		Uranium-238	11.300	34.01			pci/L	
	9/24/2003	Uranium-234	21.600				pci/L	
		Uranium-235	0.855				pci/L	
		Uranium-238	11.800	34.26			pci/L	
3/16/2004	Uranium-234	19.200				pci/L		
	Uranium-235	0.661				pci/L		
	Uranium-238	10.000	29.86			pci/L		

Table 3-8 - Revision 0
Background Groundwater Concentrations
Sandstone C

Preparer: J. Lux Date: 8/10/22

Reviewer: B. Brittain

Date: 8/29/22

Monitor Well	Date	Analyte	Result	Total Uranium	Detection Limit	Reporting Limit	Unit	Qual
1328	8/30/2004	Uranium-234	21.200		0.067		pci/L	
		Uranium-235	2.740		0.060		pci/L	
		Uranium-238	11.800	35.74	0.023		pci/L	
	6/1/2005	Uranium-234	22.000		0.097	0.100	pci/L	
		Uranium-235	1.180		0.047	0.100	pci/L	
		Uranium-238	12.400	35.58	0.047	0.100	pci/L	
	5/23/2006	Uranium-234	20.300		0.064	0.100	pci/L	J
		Uranium-235	1.080		0.055	0.100	pci/L	J
		Uranium-238	10.100	31.48	0.053	0.100	pci/L	J
	8/14/2007	Uranium-234	21.300		0.153	0.100	pci/L	J-
		Uranium-235	1.210		0.105	0.100	pci/L	
		Uranium-238	11.700	34.21	0.077	0.100	pci/L	
	6/24/2008	Uranium-234	20.500		0.093	0.100	pci/L	
		Uranium-235	0.738		0.069	0.100	pci/L	
		Uranium-238	11.200	32.44	0.061	0.100	pci/L	
	11/13/2014	Uranium-234	20.200		0.363	1.000	pci/L	
		Uranium-235	1.000		0.495	1.000	pci/L	U
		Uranium-238	12.000	33.20	0.067	0.200	pci/L	
	4/1/2015	Uranium-234	18.200		0.262	1.000	pci/L	
		Uranium-235	0.622		0.518	1.000	pci/L	
		Uranium-238	10.500	29.32	0.067	0.200	pci/L	
Uranium-234		20.600		0.262	1.000	pci/L		
Uranium-235		0.803		0.518	1.000	pci/L		
Uranium-238		13.200	34.60	0.067	0.200	pci/L		
Uranium-234		19.800		0.262	1.000	pci/L		
Uranium-235		1.000		0.518	1.000	pci/L	U	
Uranium-238		12.100	32.90	0.067	0.200	pci/L		
Uranium-234		18.200		0.262	1.000	pci/L		
Uranium-235		1.000		0.518	1.000	pci/L	U	
Uranium-238		9.240	28.44	0.067	0.200	pci/L		
Uranium-234		24.900		0.262	1.000	pci/L		
Uranium-235		1.000		0.518	1.000	pci/L	U	
Uranium-238		10.100	36.00	0.067	0.200	pci/L		
Uranium-234	20.100		0.262	1.000	pci/L			
Uranium-235	0.426		0.518	1.000	pci/L			
Uranium-238	9.960	30.49	0.067	0.200	pci/L			

Table 3-8 - Revision 0
Background Groundwater Concentrations
Sandstone C

Preparer: J. Lux Date: 8/10/22

Reviewer: B. Brittain

Date: 8/29/22

Monitor Well	Date	Analyte	Result	Total Uranium	Detection Limit	Reporting Limit	Unit	Qual	
1339	2/20/1997	Uranium-234	11.000				pci/L		
		Uranium-235	0.200				pci/L		
		Uranium-238	3.700	14.90				pci/L	
	6/18/1998	Uranium-234	13.500					pci/L	
		Uranium-235	0.300					pci/L	
		Uranium-238	4.200	18.00				pci/L	
	6/29/1999	Uranium-234	14.600					pci/L	
		Uranium-235	0.300					pci/L	
		Uranium-238	3.500	18.40				pci/L	
	6/26/2002	Uranium-234	16.300					pci/L	
		Uranium-235	2.320					pci/L	
		Uranium-238	4.090	22.71				pci/L	
	10/21/2010	Uranium-234	12.500			0.022	0.100	pci/L	
		Uranium-235	0.259			0.027	0.100	pci/L	
		Uranium-238	4.060	16.82		0.022	0.100	pci/L	
	3/31/2015	Uranium-234	12.000			0.458	1.000	pci/L	
		Uranium-235	0.626			0.525	1.000	pci/L	
		Uranium-238	3.830	16.46		0.067	0.200	pci/L	
		Uranium-234	10.500			0.458	1.000	pci/L	
		Uranium-235	1.000			0.525	1.000	pci/L	U
		Uranium-238	4.020	15.52		0.067	0.200	pci/L	
		Uranium-234	13.900			0.458	1.000	pci/L	
		Uranium-235	1.000			0.525	1.000	pci/L	U
		Uranium-238	4.680	19.58		0.067	0.200	pci/L	
Uranium-234		11.900			0.458	1.000	pci/L		
Uranium-235		0.437			0.525	1.000	pci/L		
Uranium-238		4.320	16.66		0.067	0.200	pci/L		
Uranium-234		12.300			0.458	1.000	pci/L		
Uranium-235		1.000			0.525	1.000	pci/L	U	
Uranium-238		4.290	17.59		0.067	0.200	pci/L		
Uranium-234	14.400			0.526	1.000	pci/L			
Uranium-235	1.000			0.446	1.000	pci/L	U		
Uranium-238	3.990	19.39		0.067	0.200	pci/L			

For Both Background Monitor Wells		
Mean		28.88
Maximum		43.67
Standard Deviation		7.40
Mean + 2σ		43.67

Table 3-9 - Revision 0
Background Groundwater Concentrations
Alluvium

Preparer: J. Lux Date: 8/10/22

Reviewer: B. Brittain

Date: 8/29/22

Monitor Well	Date	Analyte	Result	Total Uranium	Detection Limit	Reporting Limit	Unit	Qual
1342	10/1/1997	Uranium-234	3.700				pci/L	
		Uranium-235	0.300				pci/L	
		Uranium-238	1.700	5.70			pci/L	
	12/16/1997	Uranium-234	4.900				pci/L	
		Uranium-235	0.300				pci/L	
		Uranium-238	3.100	8.30			pci/L	
	3/6/1998	Uranium-234	3.700				pci/L	
		Uranium-235	0.300				pci/L	
		Uranium-238	2.500	6.50			pci/L	
	6/17/1998	Uranium-234	5.000				pci/L	
		Uranium-235	0.200				pci/L	
		Uranium-238	2.600	7.80			pci/L	
	6/23/1999	Uranium-234	7.300				pci/L	
		Uranium-235	0.300				pci/L	
		Uranium-238	4.400	12.00			pci/L	
	6/29/2000	Uranium-234	3.460				pci/L	
		Uranium-235	0.148		0.148	0.148	pci/L	U
		Uranium-238	1.460	5.07			pci/L	
6/27/2001	Uranium-234	3.400				pci/L		
	Uranium-235	0.144				pci/L		
	Uranium-238	1.790	5.33			pci/L		
5/28/2013	Uranium-234	3.470			0.463	1.000	pci/L	
	Uranium-235	1.000			0.310	1.000	pci/L	U
	Uranium-238	1.510	5.98		0.251	1.000	pci/L	
T-103	12/17/2014	Uranium-234	5.390				pci/L	
		Uranium-235	1.000				pci/L	U
		Uranium-238	3.300	9.69			pci/L	

For Both "Background" Monitor Wells	
Mean	7.37
Maximum	12.00
Standard Deviation	2.31
Mean + 2σ	12.00

Table 5-1 - Revision 0
Project Transportation Emissions Estimate

Preparer: A. Anstaett; Date: 10/15/21
 Reviewer: E. Dulle; Date: 09/09/22

Description	Total Project Emissions (tons)						
	Criteria Pollutants						CO ₂ e
	NO _x	CO	VOC	PM ₁₀	PM _{2.5}	SO ₂	
Construction engine emissions	6.93	1.87	0.54	0.30	0.29	0.00	322
Unpaved roads	--	--	--	65.79	6.58	--	--
Paved roads	--	--	--	4.37	1.07	--	--
Earthmoving	--	--	--	17.93	3.73	--	--
On-Road tailpipe	13.67	69.28	8.10	0.86	0.73	9.59E-02	6,037
Total emissions	20.60	71.15	8.65	89.25	12.41	0.10	6,359

**Table 8-1 - Revision 0
Uranium Treatment Train
Valve Arrangements**

Preparer: J. Wilson; Date: 10/27/21
Reviewer: E. Lloyd; Date: 09/09/22

WA TRAIN AT WATF

	Initial Vessel Sequence	Second Vessel Sequence	Third Vessel Sequence
Lead Vessel	VSL-101	VSL-102	VSL-103
Lag Vessel	VSL-102	VSL-103	VSL-101
Polish Vessel	VSL-103	VSL-101	VSL-102

VALVE ID	VALVE POSITION		
V-101	OPEN	CLOSED	CLOSED
V-102	CLOSED	OPEN	CLOSED
V-104	OPEN	CLOSED	OPEN
V-105	OPEN	OPEN	OPEN
V-106	CLOSED	CLOSED	OPEN
V-108	OPEN	OPEN	CLOSED
V-112	OPEN	CLOSED	CLOSED
V-119	CLOSED	OPEN	CLOSED
V-120	CLOSED	CLOSED	OPEN
V-123	OPEN	OPEN	OPEN
V-131	CLOSED	OPEN	OPEN
V-132	OPEN	OPEN	OPEN

Note: After the third sequence, the valve arrangement restores the initial vessel sequence, and the process starts over.

**Table 8-1 - Revision 0
Uranium Treatment Train
Valve Arrangements**

Preparer: J. Wilson; Date: 10/27/21
Reviewer: E. Lloyd; Date: 09/09/22

BA1 TRAIN AT WATF

	Initial Vessel Sequence	Second Vessel Sequence	Third Vessel Sequence
Lead Vessel	VSL-151	VSL-152	VSL-153
Lag Vessel	VSL-152	VSL-153	VSL-151
Polish Vessel	VSL-153	VSL-151	VSL-152

VALVE ID	VALVE POSITION		
V-150	CLOSED	CLOSED	OPEN
V-151	OPEN	CLOSED	CLOSED
V-152	CLOSED	OPEN	CLOSED
V-153	OPEN	OPEN	OPEN
V-154	OPEN	CLOSED	OPEN
V-155	OPEN	OPEN	OPEN
V-157	CLOSED	CLOSED	OPEN
V-158	OPEN	OPEN	CLOSED
V-159	OPEN	OPEN	OPEN
V-162	OPEN	CLOSED	CLOSED
V-169	CLOSED	OPEN	CLOSED
V-180	CLOSED	OPEN	OPEN

Note: After the third sequence, the valve arrangement restores the initial vessel sequence, and the process starts over.

Table 8-2 - Revision 0
In-Process Groundwater Monitoring Locations

Preparer: J. Lux; Date: 5/20/22

Reviewer: E. Dulle; Date: 9/9/22

Remediation Area	Plume Segment	Monitoring Location	Uranium	DTW
BA1-A	Sandstone B	02W27	----	Q
		02W30	A	Q
		02W40	Q	Q
		02W41	A	Q
		02W42	A	Q
		02W47	----	Q
		1316R	----	Q
		TMW-01	A	Q
		TMW-08	A	Q
		TMW-25	A	Q
	Transition Zone	02W03	Q	Q
		02W28	A	Q
		02W39	A	Q
		1315R	Q	Q
		1404	Q	Q
		1405	Q	Q
		TMW-07	A	Q
		1412	Q	Q
		1413	Q	Q
BA1-B	South of GE-BA1-02	02W04	A	Q
		02W32	Q	Q
		TMW-13	Q	Q
	North of GE-BA1-02 / South of GE-BA1-03	02W07	Q	Q
		02W08	Q	Q
		02W14	A	Q
		02W19	Q	Q
	North of GE-BA1-03 / South of GE-BA1-04	02W18	A	Q
		02W37	A	Q
		02W38	A	Q
		02W44	Q	Q
		1410	Q	Q
	North of GE-BA1-04	02W43	A	Q
		1411	Q	Q
	1206-NORTH		MWWA-09	Q
		MWWA-03	Q	Q

**Table 8-2 - Revision 0
In-Process Groundwater Monitoring Locations**

Preparer: J. Lux; Date: 5/20/22
Reviewer: E. Dulle; Date: 9/9/22

Remediation Area	Plume Segment	Monitoring Location	Uranium	DTW
WAA U>DCGL		T-62	Q	Q
		T-63	Q	Q
		T-64	Q	Q
		T-65	Q	Q
		T-66	A	Q
		T-68	Q	Q
		T-69	A	Q
		T-72	Q	Q
		T-75	A	Q
		T-76	A	Q
		T-77	A	Q
		T-79	A	Q
		T-84	A	Q
		T-104	Q	Q
	T-105	Q	Q	
WU-BA3		1351	Q	Q
		1352	Q	Q
		1356	Q	Q
		1358	----	Q
		1359	A	Q

Notes:

- DTW measurement frequency for the first 3 months of operation is in Section 8.6.1.

DTW - depth to water

Q - quarterly

A - annually

**Table 8-3 - Revision 0
Water Treatment In-Line Monitoring**

Prepare: J. Wilson; Date: 10/27/21
Reviewer: E. Dulle; Date: 09/09/22

Sampled Material	Flow (gpm)	pH	Instrument ID	Appendix	Drawing
Tank 101 Influent (pre-acidification)		X	AE100	J-3	P115 SHT 1 - D1
WA Train Influent (post-acidification)	X		FIT100		P115 SHT 2 - D5
		X	AE101		P115 SHT 2 - D5
Tank 105 Influent (pre-acidification)		X	AE130		P115 SHT 3 - D2
BA1 Train Influent (post-acidification)	X		FIT150		P115 SHT 4 - D6
		X	AE151		P115 SHT 4 - D5
Outfall 001	X		FIT103		P115 SHT 5 - D5

Note: "Sample IDs" are not required for real-time in-line measurements.
gpm - gallons per minute

Table 8-4 - Revision 0
Treatment System Monitoring - Weekly Sampling

Preparer: A. Anstaett; Date: 09/29/21

Reviewer: E. Dulle; Date: 09/09/22

Process	Sampled Material	Sample ID	pH (field)	U-235 & 238 by EPA 200.8	Nitrate by EPA 353.2	Fluoride by EPA 300.0	Tc-99 by HASL 300	Sample Port ID	Appendix	Drawing	
WATF WA Train Ion Exchange Skid for Western Area Groundwater	WA Train Influent (pre-acid addition)	WATF Pre Acid/S1-1	X	X			X	S1-1	J-3	P115 SHT 2 - E7	
	WA Train Influent (post-acid addition)	WATF1 Post Acid/S1-2	X					S1-2		P115 SHT 1 - E5	
	WA Train Lead Vessel Effluent	First Cycle	WATF1 Lead Eff/S1-3		X			X		S1-3	P115 SHT 2 - D4
		Second Cycle	WATF1 Lead Eff/S1-4		X			X		S1-4	P115 SHT 2 - D3
		Third Cycle	WATF Lead EFF/S1-5		X			X		S1-5	P115 SHT 2 - D3
	WA Train Lag Vessel Effluent	First Cycle	WATF1 Lag Eff/S1-4		X			X		S1-4	P115 SHT 2 - D3
		Second Cycle	WATF1 Lag Eff/S1-5		X			X		S1-5	P115 SHT 2 - D3
		Third Cycle	WATF1 Lag Eff/S1-3		X			X		S1-3	P115 SHT 2 - D4
	WA Train Polish Vessel Effluent	First Cycle	WATF1 Polish Eff/S1-5	X	X			X		S1-5	P115 SHT 2 - D3
		Second Cycle	WATF1 Polish Eff/S1-3	X	X			X		S1-3	P115 SHT 2 - D4
		Third Cycle	WATF1 Polish Eff/S1-4	X	X			X		S1-4	P115 SHT 2 - D3
	WATF BA Train Ion Exchange Skid for BA1 Groundwater at WATF (see Note)	BA Train Influent (pre-acid addition)	WATF BA1 Pre Acid/S2-1	X	X			X		S2-1	J-3
BA Train Influent (post-acid addition)		WATF BA1 Post Acid/S2-2	X					S2-2	P115 SHT 4 - E5		
BA Train Lead Vessel Effluent		First Cycle	WATF BA1 Lead Eff/S2-3		X			X	S2-3	P115 SHT 4 - D5	
		Second Cycle	WATF BA1 Lead Eff/S2-4		X			X	S2-4	P115 SHT 4 - D4	
		Third Cycle	WATF BA1 Lead Eff/S2-5		X			X	S2-5	P115 SHT 4 - D4	
BA Train Lag Vessel Effluent		First Cycle	WATF BA1 Lag Eff/S2-4		X			X	S2-4	P115 SHT 4 - D4	
		Second Cycle	WATF BA1 Lag Eff/S2-5		X			X	S2-5	P115 SHT 4 - D4	
		Third Cycle	WATF BA1 Lag Eff/S2-3		X			X	S2-3	P115 SHT 4 - D5	
BA Train Polish Vessel Effluent		First Cycle	WATF BA1 Polish Eff/S2-5	X	X			X	S2-5	P115 SHT 4 - D3	
		Second Cycle	WATF BA1 Polish Eff/S2-3	X	X			X	S2-3	P115 SHT 4 - D5	
		Third Cycle	WATF BA1 Polish Eff/S2-4	X	X			X	S2-4	P115 SHT 4 - D4	
Effluent		WATF Effluent in Tank 102*	WATF Effluent	X	X	X	X	X	S-WAE	J-3	

Notes: Samples to be collected the first business day of each week.

First Cycle Vessel configuration before changeout and after 3rd, 6th, etc. changeout

Second Cycle Vessel configuration after 1st, 4th, etc. changeout

Third Cycle Vessel configuration after 2nd, 5th, etc. changeout

*The WATF effluent will initially be sampled on a weekly basis; once consistent compliance with discharge criteria has been demonstrated, the WATF effluent sampling frequency will be reduced to semi-monthly.

**Table 8-5 - Revision 0
Discharge Injection System Monitoring**

Preparer: J Lux; Date: 05/20/22
Reviewer: E. Dulle; Date: 09/09/22

Location	Sample ID	Flow (gpm)	pH by EPA 4500	U-235/U-238 by EPA 200.8	Nitrate by EPA 300.0	Fluoride by EPA 300.0	Instrument/Sample Port ID	Appendix	Drawing
Western Area & BA1 Combined Discharge	Outfall 001	X					FIT-103	J-3	P115 SHT5 - D5
			X	X	X	X	S-WAE		
BA1 Injection	GWI-BA1-01A	X					FT-2101	I-4	P105
	GWI-BA1-02A	X					FT-2102		
	GWI-BA1-03A	X					FT-2103		
	GWI-BA1-04	X					FT-2104		
	For All 4 Wells		X	X	X	X	S-BAI		
Western Area Injection	GWI-WU-01A	X					FT-1101	I-4	P104
			X	X	X	X	S-WAI		P103

Notes: Discharge samples are collected on the first business day of the month and the first business day following the 14th day of the month.

Discharge monitoring reports to be submitted by the 15th of each month.

gpm - gallons per minute

COC - contaminant of concern

**Table 8-6 - Revision 0
Spent Resin Mixture Sampling**

Preparer: A. Anstaett; Date: 09/29/21
Reviewer: E. Dulle; Date: 09/09/22

Sampled Material		Sample ID
Resin Mixture from Treatment Skid for the Burial Area #1	1st Batch of Spent Resin	BA1-01-01 BA1-01-02 ↓ BA1-01-XX
	2nd Batch of Spent Resin	BA1-02-01 BA1-02-02 ↓ BA1-02-XX
Resin Mixture from the Treatment Skid for the Western Area	1st Batch of Spent Resin	WA1-01-01 WA1-01-02 ↓ WA1-01-XX
	2nd Batch of Spent Resin	WA1-02-01 WA1-02-02 ↓ WA1-02-XX

- Notes: 1. All samples will be analyzed for U-235 & U-238 by EPA 200.8.
 2. Samples from the WA treatment skid will be analyzed for Tc-99 by HASL 300.
 2. Once homogeneity of uranium in processed resin has been established, one sample per resin vessel will be collected for laboratory analysis.

Table 8-7 - Revision 0
Evaluation of Discharge Concentrations
With 10 CFR 20.2001 Effluent Limits

Preparer: J. Lux, Date: 9/20/22
 Reviewer: A. Anstaett, Date: 9/21/22

From Decommissioning Plan - Rev 3, Figure 8-3				
Flow Rate (gpm)		Maximum Concentration		
WA Groundwater -	107	Uranium (µg/L) -	159	Tc-99 (ng/L) - 1.26
BA1 Groundwater -	100	Uranium (µg/L) -	1018	Tc-99 (ng/L) - 0

Table 8-7(a) - Combined Influent Concentration Calculation				
	WA Groundwater	BA1 Groundwater	Combined Influent	
	Mass per Minute (µg)	Mass per Minute (µg)	Mass per Minute (µg)	Concentration (µg/L)
Uranium	64309.14	384804	449,113	574
Tc-99	5.10E-01	0.00E+00	5.10E-01	6.51E-04

Table 8-7(b) - Determination of Effluent Concentration						
Radionuclide	Influent (Max) ¹				Effluent (Max) ³	
	(ug/L)	% of mass ²	pCi/ug	(pCi/L)	(ug/L)	(pCi/L)
Total U	574				5	
U-238		9.79E-01	3.33E-01	1.87E+02	4.90E+00	1.63E+00
Th-234				1.87E+02		1.87E+02
Pa-234				1.87E+02		1.87E+02
U-235		2.10E-02	2.14E+00	2.58E+01	1.05E-01	2.25E-01
Th-231				2.58E+01		2.58E+01
U-234		1.40E-04	6.19E+03	4.97E+02	7.00E-04	4.33E+00
Tc-99	6.51E-04		1.71E+04	1.12E+01	6.51E-04	1.12E+01

Notes:

¹ Assumes that uranium daughters are in secular equilibrium with the parent in the influent groundwater. Thorium is typically insoluble; it is unlikely that there will be measurable thorium in influent or effluent.

² Assumes U-235 enrichment of BA1 is 1.3%, of WA groundwater is 2.9%, and combined influent is 2.1% % of mass is from *Determination of Conservative U-235 Enrichment Levels for Groundwater at Cimarron Site, Enercon Service, Inc., August 17, 2017 (ML17303A788)*

³ Assumes 5 ug/L uranium in effluent; no uranium daughters or Tc-99 are captured by ion exchange resin.

Table 8-7(c) - Effluent Evaluation				
Radionuclide	Half Life	Effluent Limit	Effluent Concentration	Effluent Concentration
	(years)	(10 CFR 20.2001) (pCi/L)	(pCi/L)	/ Limit
U-238	4.51E+09	3.00E+02	1.63E+00	5.44E-03
Th-234	6.60E-02	5.00E+03	1.87E+02	3.75E-02
Pa-234	2.23E-06	3.00E+04	1.87E+02	6.24E-03
U-235	7.10E+08	3.00E+02	2.25E-01	7.49E-04
Th-231	2.91E-03	5.00E+04	2.58E+01	5.16E-04
U-234	2.47E+05	3.00E+02	4.33E+00	1.44E-02
Tc-99	2.11E+05	6.00E+04	1.12E+01	1.86E-04
Sum of Fractions				0.07

Note:

gpm = gallons per minute

µg = microgram

ng = nanogram

L = Liter

pCi = picoCurie

Table 8-8 - Revision 0
Post-Remediation Groundwater Monitoring Locations

Preparer: J. Lux; Date: 05/20/22
 Reviewer: E. Dulle; Date: 09/09/22

Area	Monitoring Location	Uranium	Tc-99
BA1-A Transition Zone	02W28	X	
	1315R	X	
	1412	X	
	1413	X	
BA1-B	02W08	X	
	02W19	X	
	1410	X	
	02W43	X	
	1411	X	
1206-NORTH	MWWA-03	X	
	MWWA-09	X	
WAA U>DCGL	T-62	X	
	T-104	X	
	T-105	X	
	T-68	X	
WU-BA3	1351	X	
	1356	X	
Uranium Pond #2	1336A		X
	1402		X
	1346		X

**Table 16-1 - Revision 0
Pre-Construction Cost Estimate**

Preparer: E. Dulle; Date: 09/16/22
Reviewer: B. Weis; Date: 09/23/22

Description		Q3-Q4 2022	2023	2024
1	License Compliance			
1a	EPM	\$80,000	\$165,000	\$165,000
1b	Enercon	\$250,000	\$500,000	\$500,000
1c	Burns & McDonnell	\$40,000	\$85,000	\$85,000
1d	Annual Environmental	\$8,000	\$15,000	\$15,000
2	NRC Fees	\$400,000	\$800,000	\$800,000
3	Decommissioning			
3a	EPM	\$60,000	\$120,000	\$120,000
3b	Burns & McDonnell			
	D. Plan Revisions	\$50,000	\$100,000	
	RAI Responses	\$100,000	\$150,000	
	BA1 Redox Evaluation	\$50,000	\$100,000	\$100,000
	Site Maintenance	\$80,000	\$160,000	\$160,000
	Final Design		\$460,000	
	Prepare Requests for Bids		\$55,000	\$55,000
	Procurement (Bidding & Contracting)		\$35,000	\$140,000
	Project Execution Planning			\$125,000
	Other (Permitting, Utilities, PM)	\$63,000	\$125,000	\$125,000
3c	Enercon	\$120,000	\$240,000	\$240,000
3d	Veolia			
	D. Plan Revisions	\$60,000	\$60,000	
	RAI Responses		\$25,000	
	Final Design		\$740,000	
	Prepare Requests for Bids		\$76,000	\$76,000
	Response to RFIs (Bidding)			\$122,000
	Procurement (Final negotiations & Award)			\$121,000
4	ODEQ Agency Fees			
4a	ODEQ Fees (includes OPDES Permit Fees)	\$15,000	\$30,000	\$30,000
5	Total Preconstruction Phase Costs	\$1,376,000	\$4,041,000	\$2,979,000

**Table 16-2 - Revision 0
Construction Cost Estimate**

Preparer: E. Dulle; Date: 09/16/22
Reviewer: B. Weis; Date: 09/23/22

Item	Description	2025
1	License Compliance	
1a	EPM	\$200,000
1b	Enercon	\$450,000
1c	Burns & McDonnell	\$80,000
2	NRC Fees	\$400,000
3	Decommissioning	
3a	EPM Support	\$145,000
3b	Enercon Support	\$250,000
3c	Veolia Support	
	<i>Construction & Fabrication Support</i>	\$430,000
	<i>Startup Support</i>	\$145,000
3d	Burns & McDonnell Support	
	<i>Site Maintenance</i>	\$80,000
	<i>Other (Utilities, PM)</i>	\$65,000
	<i>Startup Support</i>	\$245,000
3e	Burns & McDonnell Capital Construction Costs ¹	
i	Site Civil	
	<i>Injection & Extraction Wells and Trenches</i>	\$940,000
	<i>Piping & Utilities</i>	\$3,000,000
	<i>Injection Skids</i>	\$285,000
	<i>Other Site Civil (Roads, Drainage, BMPs, Restoration, Survey, etc.)</i>	\$1,000,000
ii	Site Electrical and Controls	\$1,100,000
iii	BARF	
	<i>BARF Civil</i>	\$330,000
	<i>Balance of BARF</i>	\$520,000
iv	WA Treatment Facility	
	<i>WA Treatment Facility Civil and Building</i>	\$2,200,000
	<i>Ion Exchange Skids (2)</i>	\$2,500,000
	<i>Resin Processing Equipment</i>	\$1,500,000
	<i>Balance of WA Treatment Facility</i>	\$3,300,000
v	Direct Capital Construction Costs Subtotal	\$16,675,000

**Table 16-2 - Revision 0
Construction Cost Estimate**

Preparer: E. Dulle; Date: 09/16/22
Reviewer: B. Weis; Date: 09/23/22

Item	Description	2025
vi	General Conditions / CM (25%)	\$4,168,750
vii	Engineering During Construction (10%)	\$1,668,000
viii	Bonds & Permits (1%)	\$167,000
ix	Indirect Capital Construction Costs Subtotal	\$6,003,750
x	Total Capital Construction Cost	\$22,678,750
4	ODEQ Agency Fees	
4	ODEQ Fees (includes OPDES Permit Fees)	\$36,000
5	Total Construction Phase Costs	\$25,204,750

¹Facility costs include equipment not specifically listed such as foundations, pavement, earthwork, etc.

²Although a portion of preconstruction occurs within the first one to two months of 1Q 2025, costs associated with EPM, Enercon, Veolia, and Burns & McDonnell support have been included here for clarity.

Table 16-3 - Revision 0
Groundwater Remediation Cost Estimate

Preparer: E. Dulle; Date: 09/16/22
 Reviewer: B. Weis; Date: 09/23/22

Item	Description								
		2026	2027	2028	2029	2030	2031	2032	2033
1	License Compliance								
1a	EPM	\$200,000	\$170,000	\$160,000	\$160,000	\$160,000	\$160,000	\$160,000	\$160,000
1b	Enercon	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000
1c	Burns & McDonnell	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000
2	NRC Fees	\$400,000	\$280,000	\$240,000	\$240,000	\$240,000	\$240,000	\$240,000	\$240,000
3	Decommissioning								
3a	EPM Support	\$140,000	\$125,000	\$120,000	\$120,000	\$120,000	\$120,000	\$120,000	\$120,000
3b	Remediation / Treatment Labor and Support	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000
3c	Treatment Facility Electric	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
3d	IX Resin	\$300,000	\$250,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
3e	6M HCl - Uranium System pH Adjustment	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000
3f	Spent Resin Disposal	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
3g	Maintenance Allowance (Burns & McDonnell)	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000
3h	In-Process Groundwater Monitoring	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000
3i	In-Process Treatment Monitoring	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
4	ODEQ Fees								
4a	ODEQ Fees (includes OPDES Permit Fees)	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000
5	Total Year Operational Phase Costs	\$3,166,000	\$2,951,000	\$2,796,000	\$2,796,000	\$2,796,000	\$2,796,000	\$2,796,000	\$2,796,000

Table 16-3 - Revision 0
Groundwater Remediation Cost Estimate

Preparer: E. Dulle; Date: 09/16/22
 Reviewer: B. Weis; Date: 09/23/22

Item	Description						Subtotal / Total
		2034	2035	2036	2037	Q1-Q2 2038	
1	License Compliance						
1a	EPM	\$160,000	\$160,000	\$160,000	\$160,000	\$80,000	\$2,050,000
1b	Enercon	\$600,000	\$600,000	\$600,000	\$600,000	\$300,000	\$7,500,000
1c	Burns & McDonnell	\$80,000	\$80,000	\$80,000	\$80,000	\$40,000	\$1,000,000
2	NRC Fees	\$240,000	\$240,000	\$240,000	\$240,000	\$120,000	\$3,200,000
3	Decommissioning						
3a	EPM Support	\$120,000	\$120,000	\$120,000	\$120,000	\$60,000	\$1,525,000
3b	Remediation / Treatment Labor and Support	\$600,000	\$600,000	\$600,000	\$300,000	\$300,000	\$7,200,000
3c	Treatment Facility Electric	\$200,000	\$200,000	\$200,000	\$100,000	\$100,000	\$2,400,000
3d	IX Resin	\$150,000	\$150,000	\$150,000	\$150,000	\$100,000	\$2,150,000
3e	6M HCl - Uranium System pH Adjustment	\$200,000	\$200,000	\$200,000	\$100,000	\$100,000	\$2,400,000
3f	Spent Resin Disposal	\$150,000	\$150,000	\$150,000	\$150,000	\$100,000	\$1,900,000
3g	Maintenance Allowance (Burns & McDonnell)	\$80,000	\$80,000	\$80,000	\$80,000	\$40,000	\$1,000,000
3h	In-Process Groundwater Monitoring	\$30,000	\$30,000	\$30,000	\$30,000	\$20,000	\$380,000
3i	In-Process Treatment Monitoring	\$150,000	\$150,000	\$150,000	\$150,000	\$100,000	\$1,900,000
4	ODEQ Fees						
4a	ODEQ Fees (includes OPDES Permit Fees)	\$36,000	\$36,000	\$36,000	\$36,000	\$18,000	\$450,000
5	Total Year Operational Phase Costs	\$2,796,000	\$2,796,000	\$2,796,000	\$2,296,000	\$1,478,000	\$35,055,000

Table 16-4 - Revision 0
Post Remediation Cost Estimate

Preparer: E.Dulle; Date: 09/23/22

Reviewer: B. Weis; Date: 09/28/22

Item	Description							Subtotal / Total
		Q3-Q4 2038	2039	2040	2041	2042	Q1-Q2 2043	
1	License Compliance							
1a	EPM	\$100,000	\$200,000	\$200,000	\$100,000	\$50,000	\$25,000	\$675,000
1b	Enercon	\$163,962	\$327,924	\$327,924	\$327,924	\$163,962	\$81,981	\$1,393,677
1c	Burns & McDonnell	\$20,000	\$40,000	\$40,000	\$40,000	\$40,000	\$20,000	\$200,000
2	NRC Fees	\$100,000	\$200,000	\$200,000	\$200,000	\$200,000	\$100,000	\$1,000,000
3	Decommissioning							
3a	EPM Support	\$70,000	\$140,000	\$140,000	\$100,000	\$50,000	\$25,000	\$525,000
3b	Maintenance Allowance (Burns & McDonnell)	\$40,000	\$80,000	\$80,000	\$80,000	\$80,000	\$40,000	\$400,000
3c	Dismantle and Disposal of Material							
	Sample & Analyze Resin & Filter Media	\$0	\$0	\$10,000	\$0	\$0	\$0	\$10,000
	Demobilize/Ship Filter Systems	\$0	\$0	\$300,000	\$0	\$0	\$0	\$300,000
	Dispose/Ship Resin	\$0	\$0	\$100,000	\$0	\$0	\$0	\$100,000
	Demobilize/Ship Resin Processing System	\$0	\$0	\$200,000	\$100,000	\$0	\$0	\$300,000
	Demobilize/Ship Ion Exchange Systems	\$0	\$0	\$0	\$300,000	\$0	\$0	\$300,000
	Demobilize/Ship Pumps, Tanks, Etc.	\$0	\$0	\$0	\$350,000	\$0	\$0	\$350,000
	Remove/Ship Wells, Piping, Utilities	\$0	\$0	\$0	\$200,000	\$0	\$0	\$200,000
3d	Post-Remediation Groundwater Monitoring	\$10,550	\$21,100	\$10,550	\$0	\$0	\$0	\$42,200
3e	Final Status Survey Plan	\$0	\$0	\$100,000	\$0	\$0	\$0	\$100,000
3f	Final Status Survey	\$0	\$0	\$0	\$250,000	\$0	\$0	\$250,000
3g	Final Status Survey Report	\$0	\$0	\$0	\$0	\$75,000	\$0	\$75,000
3h	License Termination	\$0	\$0	\$0	\$0	\$0	\$50,000	\$50,000
4	ODEQ Fees							
4a	ODEQ Fees (includes OPDES Permit Fees)	\$15,000	\$30,000	\$30,000	\$30,000	\$30,000	\$15,000	\$150,000
5	Total Year Operational Phase Costs	\$519,512	\$1,039,024	\$1,738,474	\$2,077,924	\$688,962	\$356,981	\$6,420,877

**Table 16-5
Cost Summary - Rev 0**

Preparer: E.Dulle; Date: 09/23/22

Reviewer: B. Weis; Date: 09/28/22

Table 16-5a

Description	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Without Escalation (Costs are in 2022 dollars)											
License Compliance	\$378,000	\$765,000	\$765,000	\$730,000	\$880,000	\$850,000	\$840,000	\$840,000	\$840,000	\$840,000	\$840,000
NRC Fees	\$400,000	\$800,000	\$800,000	\$400,000	\$400,000	\$280,000	\$240,000	\$240,000	\$240,000	\$240,000	\$240,000
Decomissioning	\$583,000	\$2,446,000	\$1,384,000	\$24,038,750	\$1,850,000	\$1,785,000	\$1,680,000	\$1,680,000	\$1,680,000	\$1,680,000	\$1,680,000
ODEQ Fees	\$15,000	\$30,000	\$30,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000
Total Annual Cost	\$1,376,000	\$4,041,000	\$2,979,000	\$25,204,750	\$3,166,000	\$2,951,000	\$2,796,000	\$2,796,000	\$2,796,000	\$2,796,000	\$2,796,000

Table 16-5b

With 3% Per Annum Escalation / Without Contingency											
Year --->	1	2	3	4	5	6	7	8	9	10	
License Compliance	\$378,000	\$787,950	\$811,589	\$797,691	\$990,448	\$985,383	\$1,003,004	\$1,033,094	\$1,064,087	\$1,096,009	\$1,128,890
NRC Fees	\$400,000	\$824,000	\$848,720	\$437,091	\$450,204	\$324,597	\$286,573	\$295,170	\$304,025	\$313,146	\$322,540
Decomissioning	\$583,000	\$2,519,380	\$1,468,286	\$26,267,791	\$2,082,191	\$2,069,304	\$2,006,008	\$2,066,188	\$2,128,174	\$2,192,019	\$2,257,780
ODEQ Fees	\$15,000	\$30,900	\$31,827	\$39,338	\$40,518	\$41,734	\$42,986	\$44,275	\$45,604	\$46,972	\$48,381
Total Annual Cost	\$1,376,000	\$4,162,230	\$3,160,421	\$27,541,911	\$3,563,361	\$3,421,018	\$3,338,570	\$3,438,727	\$3,541,889	\$3,648,146	\$3,757,590
Initial Available Funds (7/1/2022)	\$71,462,410										
Year-End Available Funds	\$70,443,722	\$66,985,929	\$64,495,367	\$37,598,410	\$34,411,033	\$31,334,126	\$28,308,897	\$25,153,259	\$21,862,902	\$18,433,385	\$14,860,129

Table 16-5c

With 3% Per Annum Escalation / With 25% Contingency											
Total Annual Cost	\$1,720,000	\$5,202,788	\$3,950,526	\$34,427,389	\$4,454,201	\$4,276,272	\$4,173,213	\$4,298,409	\$4,427,361	\$4,560,182	\$4,696,988
Initial Available Funds (7/1/2022)	\$71,462,410										
Year-End Available Funds	\$70,099,722	\$65,597,932	\$62,303,385	\$28,499,030	\$24,329,819	\$20,296,845	\$16,326,601	\$12,191,458	\$7,886,011	\$3,404,689	(\$1,258,252)

Notes:

\$71,189,722 is the actual amount of funding available in the Federal, State and Standby Trust Accounts.

Table 16-5a was created by taking the costs from Tables 16-4 through 16-4 (adjusted the values for the 2nd half of 2022).

For all tables, Year-End Available Funds were calculated by adding 1% to the previous year's Year-End Available Funds and subtracting the year's Total Annual Cost.

For Table 16-5b, the Total Annual Cost in 2022 dollars is escalated by 3% per annum by (1.03^n) , where "n" is the number of years).

For Table 16-5c, the Total Annual Cost represents the Total Annual Cost from Table 2 with a 25% contingency added.

**Table 16-5
Cost Summary - Rev 0**

Preparer: E.Dulle; Date: 09/23/22
Reviewer: B. Weis; Date: 09/28/22

Table 16-5a

Description	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
Without Escalation (Costs are in 202											
License Compliance	\$840,000	\$840,000	\$840,000	\$840,000	\$840,000	\$703,962	\$567,924	\$567,924	\$467,924	\$253,962	\$126,981
NRC Fees	\$240,000	\$240,000	\$240,000	\$240,000	\$240,000	\$220,000	\$200,000	\$200,000	\$200,000	\$200,000	\$100,000
Decomissioning	\$1,680,000	\$1,680,000	\$1,680,000	\$1,680,000	\$1,180,000	\$1,040,550	\$241,100	\$940,550	\$1,380,000	\$205,000	\$115,000
ODEQ Fees	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$33,000	\$30,000	\$30,000	\$30,000	\$30,000	\$15,000
Total Annual Cost	\$2,796,000	\$2,796,000	\$2,796,000	\$2,796,000	\$2,296,000	\$1,997,512	\$1,039,024	\$1,738,474	\$2,077,924	\$688,962	\$356,981

Table 16-5b

With 3% Per Annum Escalatic											
	11	12	13	14	15	16	17	18	19	20	21
License Compliance	\$1,162,756	\$1,197,639	\$1,233,568	\$1,270,575	\$1,308,693	\$1,129,652	\$938,692	\$966,853	\$820,508	\$458,684	\$236,222
NRC Fees	\$332,216	\$342,183	\$352,448	\$363,022	\$373,912	\$353,035	\$330,570	\$340,487	\$350,701	\$361,222	\$186,029
Decomissioning	\$2,325,513	\$2,395,278	\$2,467,137	\$2,541,151	\$1,838,402	\$1,669,777	\$398,502	\$1,601,223	\$2,419,838	\$370,253	\$213,934
ODEQ Fees	\$49,832	\$51,327	\$52,867	\$54,453	\$56,087	\$52,955	\$49,585	\$51,073	\$52,605	\$54,183	\$27,904
Total Annual Cost	\$3,870,318	\$3,986,427	\$4,106,020	\$4,229,201	\$3,577,093	\$3,205,420	\$1,717,348	\$2,959,636	\$3,643,652	\$1,244,342	\$664,090
Initial Available Funds (7/1/2022)											
Year-End Available Funds	\$11,138,412	\$7,263,369	\$3,229,983	(\$966,919)	(\$4,553,681)	(\$7,804,638)	(\$9,600,033)	(\$12,655,669)	(\$16,425,878)	(\$17,834,479)	(\$18,676,913)

Table 16-5c

With 3% Per Annum Escalation / Witi											
Total Annual Cost	\$4,837,897	\$4,983,034	\$5,132,525	\$5,286,501	\$4,471,366	\$4,006,775	\$2,146,685	\$3,699,545	\$4,554,565	\$1,555,428	\$830,112
Initial Available Funds (7/1/2022)											
Year-End Available Funds	(\$6,108,732)	(\$11,152,854)	(\$16,396,908)	(\$21,847,378)	(\$26,537,218)	(\$30,809,366)	(\$33,264,145)	(\$37,296,331)	(\$42,223,859)	(\$44,201,526)	(\$45,473,653)