

TABLE 1
SOIL SAMPLE FIELD DATA SUMMARY TABLE
NEWBY 30N-34HZ
WELD COUNTY, COLORADO
KERR-MCGEE OIL AND GAS ONSHORE, LP

Soil Sample Location	Date	Depth (ft. bgs)	PID Reading (ppm)	Visual Observation	Olfactory Observation	Latitude	Longitude	Submitted for Lab Analysis? (Y/N)
RELEASE AREA SAMPLES								
SS01@0.5'	5/5/2023	0.5	619.2	Stain	Odor	40.18183244	-105.0080062	Y
SS02@0.5'	5/5/2023	0.5	1.4	NS	NO	40.18186248	-105.0079931	N
SS03@0.5'	5/5/2023	0.5	35.7	NS	NO	40.18181273	-105.0079749	N
SS04@0.5'	5/5/2023	0.5	25.6	NS	NO	40.1817808	-105.0080087	N
SS05@2'	5/18/2023	2	1.2	Stain	Slight Odor	40.18182263	-105.0080121	Y
SS05@4'	5/18/2023	4	0.7	NS	NO	40.18182263	-105.0080121	Y
SS05@6'	5/18/2023	6	0.4	NS	NO	40.18182263	-105.0080121	Y
SS06@2'	5/18/2023	2	0.2	NS	NO	40.18183219	-105.0079389	Y
SS06@4'	5/18/2023	4	0.2	NS	NO	40.18183219	-105.0079389	Y
SS06@6'	5/18/2023	6	0.0	NS	NO	40.18183219	-105.0079389	Y
SS07@2'	5/18/2023	2	0.5	NS	NO	40.18188305	-105.0080276	Y
SS07@4'	5/18/2023	4	0.0	NS	NO	40.18188305	-105.0080276	Y
SS07@6'	5/18/2023	6	0.0	NS	NO	40.18188305	-105.0080276	Y
SS08@2'	5/18/2023	2	0.5	NS	NO	40.18176637	-105.0080345	Y
SS08@4'	5/18/2023	4	0.0	NS	NO	40.18176637	-105.0080345	Y
SS08@6'	5/18/2023	6	0.0	NS	NO	40.18176637	-105.0080345	Y
SS09@2'	5/18/2023	2	0.6	NS	NO	40.18184737	-105.0080969	Y
SS09@4'	5/18/2023	4	0.2	NS	NO	40.18184737	-105.0080969	Y
SS09@6'	5/18/2023	6	0.0	NS	NO	40.18184737	-105.0080969	Y
SS10@1'	7/24/2023	1	0.0	NS	NO	40.18183169	-105.0080136	Y
BACKGROUND SOIL SAMPLES								
Native-BG01@0.25'	5/18/2023	0.25	0.0	NS	NO	40.18200896	-105.0079099	Y
Native-BG01@3'	5/18/2023	3	0.0	NS	NO	40.18200896	-105.0079099	Y
Native-BG02@0.25'	5/18/2023	0.25	0.4	NS	NO	40.18176815	-105.0077951	Y
Native-BG02@3'	5/18/2023	3	0.0	NS	NO	40.18176815	-105.0077951	Y
Native-BG03@0.25'	5/18/2023	0.25	0.1	NS	NO	40.18171796	-105.0079886	Y
Native-BG03@3'	5/18/2023	3	0.4	NS	NO	40.18171796	-105.0079886	Y
Native-BG04@0.25'	5/18/2023	0.25	0.0	NS	NO	40.18188005	-105.008181	Y
Native-BG04@3'	5/18/2023	3	0.2	NS	NO	40.18188005	-105.008181	Y
Native-BG05@3'	6/8/2023	3	0.4	NS	NO	40.18181522	-105.0077547	Y
Native-BG05@6'	6/8/2023	6	0.7	NS	NO	40.18181522	-105.0077547	Y
Native-BG06@3'	6/8/2023	3	2.0	NS	NO	40.18202896	-105.007997	Y
Native-BG06@6'	6/8/2023	6	1.7	NS	NO	40.18202896	-105.007997	Y

TABLE 1
SOIL SAMPLE FIELD DATA SUMMARY TABLE
NEWBY 30N-34HZ
WELD COUNTY, COLORADO
KERR-MCGEE OIL AND GAS ONSHORE, LP

Notes:

ft. - feet

bgs - below ground surface

PID - Photoionization detector

ppm - parts per million

NS - No Staining

NO - No Odor

NA - Not Analyzed/Not Applicable

TABLE 2-1
SOIL SAMPLE ANALYTICAL RESULTS
VOLATILE ORGANIC COMPOUNDS AND TOTAL PETROLEUM HYDROCARBONS
NEWBY 30N-34HZ
WELD COUNTY, COLORADO
KERR-MCGEE OIL AND GAS ONSHORE, LP

Soil Sample ID	Date	Depth (ft. bgs)	TPH-GRO ⁺ (mg/kg)	TPH-DRO ⁺ (mg/kg)	TPH-RRO ⁺ (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	1,2,4- Trimethyl benzene (mg/kg)	1,3,5- Trimethyl benzene (mg/kg)	Naphthalene (mg/kg)
Groundwater Protection Values (GPV)			500	500	500	0.0026	0.69	0.78	9.9	0.0081	0.0087	0.0038
RELEASE AREA SAMPLES												
SS01@0.5'	5/5/2023	0.5	324	789	210	0.513	4.54	2.08	21.8	9.44	3.67	0.554
SS05@2'	5/18/2023	2	<0.200	<25.0	<100	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00201
SS05@4'	5/18/2023	4	<0.200	<25.0	<100	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00201
SS05@6'	5/18/2023	6	<0.200	<25.0	<100	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00201
SS06@2'	5/18/2023	2	<0.200	<25.0	<100	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00201
SS06@4'	5/18/2023	4	<0.200	<25.0	<100	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00201
SS06@6'	5/18/2023	6	<0.200	<25.0	<100	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00201
SS07@2'	5/18/2023	2	<0.200	<25.0	<100	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00201
SS07@4'	5/18/2023	4	<0.200	<25.0	<100	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00201
SS07@6'	5/18/2023	6	<0.200	<25.0	<100	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00201
SS08@2'	5/18/2023	2	<0.200	<25.0	<100	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00201
SS08@4'	5/18/2023	4	<0.200	<25.0	<100	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00201
SS08@6'	5/18/2023	6	<0.200	<25.0	<100	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00201
SS09@2'	5/18/2023	2	<0.200	<25.0	<100	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00201
SS09@4'	5/18/2023	4	<0.200	<25.0	<100	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00201
SS09@6'	5/18/2023	6	<0.200	<25.0	<100	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00201
SS10@1'	7/24/2023	1	<0.200	<25.0	<100	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.002

TABLE 2-2
SOIL SAMPLE ANALYTICAL RESULTS
POLYCYCLIC AROMATIC HYDROCARBONS
NEWBY 30N-34HZ
WELD COUNTY, COLORADO
KERR-MCGEE OIL AND GAS ONSHORE, LP

Soil Sample ID	Date	Depth (ft. bgs)	Acenaphthene (mg/Kg)	Anthracene (mg/Kg)	Benzo (a) anthracene (mg/Kg)	Benzo (b) fluoranthene (mg/Kg)	Benzo (k) fluoranthene (mg/Kg)	Benzo (a) pyrene (mg/Kg)	Chrysene (mg/Kg)	Dibenz (a,h) anthracene (mg/Kg)	Fluoranthene (mg/Kg)	Fluorene (mg/Kg)	Indeno (1,2,3-cd) pyrene (mg/Kg)	1-Methyl naphthalene (mg/Kg)	2-Methyl naphthalene (mg/Kg)	Pyrene (mg/Kg)
Groundwater Protection Values (GPV)			0.55	5.8	0.011	0.3	2.9	0.24	9	0.096	8.9	0.54	0.98	0.006	0.019	1.3
RELEASE AREA SAMPLES																
SS01@0.5'	5/5/2023	0.5	0.255	0.0345	0.0353	<0.0067	<0.0067	<0.0067	0.191	<0.0067	<0.0067	0.584	<0.0067	2.4	3.57	0.0613
SS05@2'	5/18/2023	2	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00201	<0.00201	<0.00067
SS05@4'	5/18/2023	4	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00201	<0.00201	<0.00067
SS05@6'	5/18/2023	6	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00201	<0.00201	<0.00067
SS06@2'	5/18/2023	2	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00201	<0.00201	<0.00067
SS06@4'	5/18/2023	4	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00201	<0.00201	<0.00067
SS06@6'	5/18/2023	6	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00201	<0.00201	<0.00067
SS07@2'	5/18/2023	2	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	0.000395 J	<0.00067	<0.00067	<0.00201	<0.00201	<0.00067
SS07@4'	5/18/2023	4	<0.00067	<0.00067	<0.00067	0.000616 J	<0.00067	<0.00067	0.000794	<0.00067	0.000432 J	<0.00067	0.000938	<0.00201	<0.00201	<0.00067
SS07@6'	5/18/2023	6	0.00137	0.00348	0.00277	0.00188	0.0013	0.00215	0.00313	<0.00067	0.0125	0.00102	0.000894	<0.00201	<0.00201	0.00924
SS08@2'	5/18/2023	2	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00201	<0.00201	<0.00067
SS08@4'	5/18/2023	4	<0.00067	<0.00067	<0.00067	0.000625 J	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00201	<0.00201	<0.00067
SS08@6'	5/18/2023	6	<0.00067	<0.00067	<0.00067	<0.00067	0.000724	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00201	<0.00201	<0.00067
SS09@2'	5/18/2023	2	<0.00067	<0.00067	0.000564 J	<0.00067	<0.00067	0.00066 J	0.000702	<0.00067	0.000718	<0.00067	<0.00067	<0.00201	<0.00201	0.00134
SS09@4'	5/18/2023	4	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00201	<0.00201	<0.00067
SS09@6'	5/18/2023	6	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00067	<0.00201	<0.00201	<0.00067
SS10@1'	7/24/2023	1	<0.020	<0.020	<0.005	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.002	<0.002	<0.020

TABLE 2-3
SOIL SAMPLE ANALYTICAL RESULTS
SOIL SUITABILITY FOR RECLAMATION
NEWBY 30N-34HZ
WELD COUNTY, COLORADO
KERR-MCGEE OIL AND GAS ONSHORE, LP

Soil Sample ID	Date	Depth (ft. bgs)	EC (mmhos/cm)	SAR	pH	Boron (mg/L)
Groundwater Protection Values (GPV)			4	6	6-8.3	2
RELEASE AREA SAMPLES						
SS01@0.5'	5/5/2023	0.5	7.68	48.0	7.51	7.04
SS05@2'	5/18/2023	2	0.540	1.11	NA	0.603
SS05@4'	5/18/2023	4	0.882	0.837	NA	0.460
SS05@6'	5/18/2023	6	0.650	0.989	NA	0.483
SS06@2'	5/18/2023	2	0.542	1.60	NA	0.667
SS06@4'	5/18/2023	4	0.660	1.01	NA	1.31
SS06@6'	5/18/2023	6	0.692	1.04	NA	0.497
SS07@2'	5/18/2023	2	0.678	1.14	NA	0.865
SS07@4'	5/18/2023	4	1.150	1.27	NA	0.787
SS07@6'	5/18/2023	6	0.901	1.21	NA	0.241
SS08@2'	5/18/2023	2	0.599	0.884	NA	0.798
SS08@4'	5/18/2023	4	0.536	0.683	NA	0.393
SS08@6'	5/18/2023	6	0.475	0.776	NA	0.284
SS09@2'	5/18/2023	2	0.539	1.08	NA	0.512
SS09@4'	5/18/2023	4	0.537	1.27	NA	0.690
SS09@6'	5/18/2023	6	0.269	0.917	NA	0.152
SS10@1'	7/24/2023	1	1.09	4.18	NA	1.11
BACKGROUND SAMPLES						
Native-BG01@0.25'	5/18/2023	0.25	0.567	0.601	8.25	0.388
Native-BG01@3'	5/18/2023	3	0.204	1.01	8.29	<0.0999
Native-BG02@0.25'	5/18/2023	0.25	0.394	0.688	8.30	0.390
Native-BG02@3'	5/18/2023	3	0.670	1.40	8.33	0.438
Native-BG03@0.25'	5/18/2023	0.25	0.552	0.913	8.27	0.896
Native-BG03@3'	5/18/2023	3	0.675	1.06	8.54	0.628
Native-BG04@0.25'	5/18/2023	0.25	0.262	1.40	8.45	<0.0992
Native-BG04@3'	5/18/2023	3	0.524	1.22	8.33	0.700
Native-BG05@3'	6/8/2023	3	0.874	1.39	7.97	0.533
Native-BG05@6'	6/8/2023	6	0.299	0.430	8.06	0.216
Native-BG06@3'	6/8/2023	3	1.03	1.11	7.90	0.592
Native-BG06@6'	6/8/2023	6	1.66	1.68	7.75	0.519

TABLE 2-4
SOIL SAMPLE ANALYTICAL RESULTS
METALS
NEWBY 30N-34HZ
WELD COUNTY, COLORADO
KERR-MCGEE OIL AND GAS ONSHORE, LP

Soil Sample ID	Date	Depth (ft. bgs)	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (VI) (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Zinc (mg/kg)
Groundwater Protection Value (GPV)			0.29	82	0.38	0.00067	46	14	26	0.26	0.8	370
RELEASE AREA SAMPLES												
SS01@0.5'	5/5/2023	0.5	2.61*	68.2	0.109	<0.503	<9.55	<9.55	<9.55	0.152	<0.0955	<95.5
SS05@2'	5/18/2023	2	6.03*	164*	0.191	NA	NA	NA	NA	0.269*	NA	NA
SS05@4'	5/18/2023	4	6.30*	174*	0.171	NA	NA	NA	NA	0.262*	NA	NA
SS05@6'	5/18/2023	6	5.78*	135*	0.150	NA	NA	NA	NA	0.273*	NA	NA
SS06@2'	5/18/2023	2	6.18*	221	0.207	NA	NA	NA	NA	0.296*	NA	NA
SS06@4'	5/18/2023	4	5.45*	119*	0.190	NA	NA	NA	NA	0.373*	NA	NA
SS06@6'	5/18/2023	6	5.67*	119*	0.138	NA	NA	NA	NA	0.314*	NA	NA
SS07@2'	5/18/2023	2	6.59*	143*	0.230	NA	NA	NA	NA	0.429*	NA	NA
SS07@4'	5/18/2023	4	6.41*	134*	0.237	NA	NA	NA	NA	0.426*	NA	NA
SS07@6'	5/18/2023	6	6.82*	270	0.139	NA	NA	NA	NA	0.241	NA	NA
SS08@2'	5/18/2023	2	6.26*	145*	0.236	NA	NA	NA	NA	0.385*	NA	NA
SS08@4'	5/18/2023	4	5.85*	111*	0.130	NA	NA	NA	NA	0.399*	NA	NA
SS08@6'	5/18/2023	6	5.97*	187*	0.139	NA	NA	NA	NA	0.249	NA	NA
SS09@2'	5/18/2023	2	6.39*	154*	0.236	NA	NA	NA	NA	0.359*	NA	NA
SS09@4'	5/18/2023	4	6.65*	145*	0.214	NA	NA	NA	NA	0.336*	NA	NA
SS09@6'	5/18/2023	6	1.90*	39.6	<0.0871	NA	NA	NA	NA	<0.0871	NA	NA
SS10@1'	7/24/2023	1	4.20*	108*	0.141	NA	NA	NA	NA	0.166	NA	NA
BACKGROUND SAMPLES												
Native-BG01@0.25'	5/18/2023	0.25	4.94	65.6	0.153	<0.5	<8.81	<8.81	<8.81	0.196	<0.0881	<88.1
Native-BG01@3'	5/18/2023	3	4.41	77.9	0.139	<0.505	<9.11	<9.11	<9.11	0.177	<0.0991	<91.1
Native-BG02@0.25'	5/18/2023	0.25	3.71	102	0.124	<0.516	10.4	<8.82	9.45	0.224	<0.0882	<88.2
Native-BG02@3'	5/18/2023	3	5.96	169	0.195	<0.5	11.7	10.6	14.1	0.272	<0.0919	<91.9
Native-BG03@0.25'	5/18/2023	0.25	6.23	150	0.249	<0.504	13.9	13.3	14.8	0.375	<0.0930	<93.0
Native-BG03@3'	5/18/2023	3	6.16	155	0.201	<0.5	12.2	12.0	13.6	0.326	<0.0864	<86.4
Native-BG04@0.25'	5/18/2023	0.25	2.03	44.0	<0.0845	<0.51	<8.45	<8.45	<8.45	0.0904	<0.0845	<84.5
Native-BG04@3'	5/18/2023	3	5.90	161	0.216	<0.518	12.4	12.0	13.9	0.294	<0.0914	<91.4
Native-BG05@3'	6/8/2023	3	5.65	152	0.201	<0.5	10.8	10.3	12.9	0.274	<0.0911	<91.1
Native-BG05@6'	6/8/2023	6	6.44	144	0.120	<0.5	<9.50	<9.50	13.7	0.231	<0.0950	<95.0
Native-BG06@3'	6/8/2023	3	6.78	173	0.224	<0.5	13.0	12.0	15.4	0.292	<0.0922	<92.2
Native-BG06@6'	6/8/2023	6	6.73	163	0.157	<0.5	9.81	9.88	13.1	0.252	<0.0932	<93.2

TABLE 2-5
SOIL SAMPLE ANALYTICAL RESULTS
NOTES
NEWBY 30N-34HZ
WELD COUNTY, COLORADO
KERR-MCGEE OIL AND GAS ONSHORE, LP

Notes:

GPV - Groundwater Protection Values (mg/kg)

TPH - Total Petroleum Hydrocarbons

GRO - Gasoline Range Organics

DRO - Diesel Range Organics

RRO - Residual Range Organics

*Allowable level for TPH is 500 mg/kg for combined GRO, DRO, ORO

Bold - exceeds Table 915-1 allowable level

EC - Electrical Conductivity

SAR - Sodium Adsorption Ratio

mmhos/cm - millimhos per centimeter

<0.00200 - less than laboratory reporting limit

NA - Not Analyzed/Not Applicable

J - Estimated value; Below reporting limit, above detection limit

*Exceeds Table 915-1 allowable level but within analytical variability of background

May 16, 2023

Ensolum

Jeremy Espinoza

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

Project Name - KMG - Newby State 30N-34Hz

Project Number - 09A1417352

Attached are your analytical results for KMG - Newby State 30N-34Hz received by Origins Laboratory, Inc. May 05, 2023. This project is associated with Origins project number Y305211-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com



Ensolum

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

Jeremy Espinoza

Project Number: 09A1417352

Project: KMG - Newby State 30N-34Hz

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS01@0.5'	Y305211-01	Soil	May 5, 2023 17:00	05/05/2023 18:33

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

Jeremy Espinoza

Project Number: 09A1417352

Project: KMG - Newby State 30N-34Hz

www.originslaboratory.com

4305211

ORIGINS LABORATORY, INC

page 1 of 1

Client: Ensolum

Project Manager: J Espinoza

Address:

Project Name: Newby State

Project Number: 09A 1417352

Telephone Number:

Email Address: KMG Team

Samples Collected By: HK

Project Name revised per the email from Jeremy on 5/10/23

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis	Sample Instructions	
				Unpreserved	HCl	HNO ₃	Groundwater	Soil	Air Summa 8	Other			Full 916
550100.5'	5/5/23	1700	3	X				X					1
													2
													3
													4
													5
													6
													7
													8
													9
													10

Relinquished By: J. Espinoza

Relinquished By:

Date: 5/5/23

Date:

Time: 1833

Time:

Received By: Ann Martinez

Received By:

Date: 05/05/23

Date:

Time: 1633

Time:

Turnaround Time: Same Day ☒ 24 Hr ☐ 48 Hr ☐ 72 Hr ☐ Standard ☐

Temp Received: 6.0 C

Date Results Needed

1725 Elk Place | Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Origins Laboratory, Inc.

J. Bynon

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Origins Laboratory

F-012207-01-R1
Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: 4305211

Client: Ensolum

Client Project ID: Newby State 15-33Hz

Checklist Completed by: JM

Date/time completed: 5/8/23

Shipped Via: TD
(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Airbill #: NA

Matrix(s) Received: (Check all that apply): ☒ Soil/Solid ☐ Water ☐ Other: _____

Cooler Number/Temperature: 1 / 10 °C 1 / _____ °C 1 / _____ °C (Describe)

Thermometer ID: 7003

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)			<input checked="" type="checkbox"/>	
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)			<input checked="" type="checkbox"/>	
Were all samples received intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?		<input checked="" type="checkbox"/>		
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
For volatiles in water — is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.			<input checked="" type="checkbox"/>	
Are samples preserved that require preservation and was it checked ⁽¹⁾ ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH <2 for samples preserved with HNO ₃ , HCL, H ₂ SO ₄) / (pH >10 for samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH)			<input checked="" type="checkbox"/>	
Additional Comments (if any):				

⁽¹⁾if NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by (Project Manager): JM

Date/Time Reviewed: 5/8/23

Origins Laboratory, Inc.

J. Bynon

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS01@0.5'

5/5/2023 5:00:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305211-01 (Soil)

Boron (DTPA Sorbitol)

Boron	7.04	0.0983	mg/L	1	B3E0808	05/08/2023	05/09/2023
-------	------	--------	------	---	---------	------------	------------

DRO/ORO by EPA 8015D

Diesel (C10-C28)	789	25.0	mg/kg	1	B3E0813	05/08/2023	05/09/2023
Residual Range Organics (C28-C40)	210	100	"	"	"	"	"

Surrogate: o-Terphenyl	56.3 %	50-150	"	"	"
------------------------	--------	--------	---	---	---

GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	9.44	0.0500	mg/kg	25	B3E0812	05/08/2023	05/08/2023
1,3,5-Trimethylbenzene	3.67	0.0500	"	"	"	"	"
Benzene	0.513	0.0500	"	"	"	"	"
Ethylbenzene	2.08	0.0500	"	"	"	"	"
Toluene	4.54	0.0500	"	"	"	"	"
Xylenes, total	21.8	0.0500	"	"	"	"	"
Gasoline Range Hydrocarbons	324	5.00	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	111 %	70-130	"	"	"
Surrogate: Toluene-d8	105 %	70-130	"	"	"
Surrogate: 4-Bromofluorobenzene	116 %	70-130	"	"	"

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS01@0.5'

5/5/2023 5:00:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305211-01 (Soil)

Metals by Saturated Paste by EPA 6010

Calcium	3.38	0.499	meq/L	10	[CALC]	05/08/2023	05/10/2023
Magnesium	1.10	0.823	"	"	"	"	"
Sodium	71.9	0.435	"	"	"	"	"

PAH by 8270D SIM

1-Methylnaphthalene	2.4	0.0109	0.0201	mg/Kg	10	L681023	05/10/2023	05/10/2023
2-Methylnaphthalene	3.57	0.0194	0.0201	"	"	"	"	"
Acenaphthene	0.255	0.00304	0.0067	"	"	"	"	"
Anthracene	0.0345	0.00334	0.0067	"	"	"	"	"
Benzo(a)anthracene	0.0353	0.00493	0.0067	"	"	"	"	"
Benzo(a)pyrene	ND	0.00468	0.0067	"	"	"	"	"
Benzo(b)fluoranthene	ND	0.00585	0.0067	"	"	"	"	"
Benzo(k)fluoranthene	ND	0.00437	0.0067	"	"	"	"	"
Chrysene	0.191	0.00624	0.0067	"	"	"	"	"
Dibenz(a,h)anthracene	ND	0.00614	0.0067	"	"	"	"	"
Fluoranthene	ND	0.00394	0.0067	"	"	"	"	"
Fluorene	0.584	0.00286	0.0067	"	"	"	"	"
Indeno(1,2,3-cd)pyrene	ND	0.00627	0.0067	"	"	"	"	"
Naphthalene	0.554	0.0145	0.0201	"	"	"	"	"
Pyrene	0.0613	0.00643	0.0067	"	"	"	"	"
Surrogate: 2-Fluorobiphenyl	56.6 %		33-115			"	"	"
Surrogate: 4-Terphenyl-d14	61.2 %		33-122			"	"	"

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS01@0.5'

5/5/2023 5:00:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Waypoint Analytical, LLC.
Y305211-01 (Soil)

PAH by 8270D SIM

Surrogate: Nitrobenzene-d5	54.1 %	29-110	L6810 23	05/10/2023	05/10/2023
----------------------------	--------	--------	-------------	------------	------------

pH in Soil by 9045D

pH	7.51	pH Units	1	B3E0810	05/08/2023	05/09/2023
----	------	----------	---	---------	------------	------------

SAR by 20B Saturated Paste

SAR	48.0	SAR	1	B3E0804	05/08/2023	05/10/2023
-----	------	-----	---	---------	------------	------------

Specific Conductance Mod. 9050A

Specific Conductance (EC)	7.68	0.00500	mmhos/cm	1	B3E0810	05/08/2023	05/09/2023
---------------------------	------	---------	----------	---	---------	------------	------------

Table 915 metals by EPA 6020B

Arsenic	2.61	0.0955	mg/kg	10	B3E0927	05/09/2023	05/12/2023
Barium	68.2	9.55	"	"	"	"	"
Cadmium	0.109	0.0955	"	"	"	"	"
Copper	ND	9.55	"	"	"	"	"
Lead	ND	9.55	"	"	"	"	"
Nickel	ND	9.55	"	"	"	"	"
Selenium	0.152	0.0955	"	"	"	"	"
Silver	ND	0.0955	"	"	"	"	"

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS01@0.5'

5/5/2023 5:00:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	------------------------	--------------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305211-01 (Soil)

Table 915 metals by EPA 6020B

Zinc	ND		95.5	mg/kg	10	B3E0927	05/09/2023	05/12/2023	
------	----	--	------	-------	----	---------	------------	------------	--

Total Metals by 7196A

Chromium, Hexavalent	ND	0.245	0.503	mg/Kg	1	L681380	05/05/2023	05/11/2023	
----------------------	----	-------	-------	-------	---	---------	------------	------------	--

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3E0812 - EPA 5030 (soil)										
Blank (B3E0812-BLK1)					Prepared: 05/08/2023 Analyzed: 05/08/2023					
1,2,4-Trimethylbenzene	ND	0.00200	mg/kg							U
1,3,5-Trimethylbenzene	ND	0.00200	"							U
Benzene	ND	0.00200	"							U
Ethylbenzene	ND	0.00200	"							U
Naphthalene	ND	0.00380	"							U
Toluene	ND	0.00200	"							U
Xylenes, total	ND	0.00200	"							U
Gasoline Range Hydrocarbons	ND	0.200	"							U
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125	104		70-130			
Surrogate: Toluene-d8	0.12		"	0.125	98.7		70-130			
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125	95.4		70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3E0812 - EPA 5030 (soil)										
LCS (B3E0812-BS1)					Prepared: 05/08/2023 Analyzed: 05/08/2023					
1,2,4-Trimethylbenzene	0.103	0.00200	mg/kg	0.100		103	70-130			
1,3,5-Trimethylbenzene	0.103	0.00200	"	0.100		103	70-130			
Benzene	0.106	0.00200	"	0.100		106	70-130			
Ethylbenzene	0.107	0.00200	"	0.100		107	70-130			
Naphthalene	0.101	0.00380	"	0.100		101	70-130			
Toluene	0.103	0.00200	"	0.100		103	70-130			
o-Xylene	0.107	0.00200	"	0.100		107	70-130			
m,p-Xylene	0.215	0.00400	"	0.200		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		102	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		97.6	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		104	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B3E0812 - EPA 5030 (soil)

Matrix Spike (B3E0812-MS1)		Source: Y305214-01			Prepared: 05/08/2023 Analyzed: 05/08/2023					
1,2,4-Trimethylbenzene	0.110	0.00200	mg/kg	0.100	ND	110	70-130			
1,3,5-Trimethylbenzene	0.111	0.00200	"	0.100	ND	111	70-130			
Benzene	0.105	0.00200	"	0.100	ND	105	70-130			
Ethylbenzene	0.106	0.00200	"	0.100	ND	106	70-130			
Naphthalene	0.102	0.00380	"	0.100	0.00136	101	70-130			
Toluene	0.105	0.00200	"	0.100	ND	105	70-130			
o-Xylene	0.107	0.00200	"	0.100	ND	107	70-130			
m,p-Xylene	0.215	0.00400	"	0.200	ND	107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		105	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		99.6	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		103	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3E0812 - EPA 5030 (soil)										
Matrix Spike Dup (B3E0812-MSD1)		Source: Y305214-01			Prepared: 05/08/2023 Analyzed: 05/08/2023					
1,2,4-Trimethylbenzene	0.115	0.00200	mg/kg	0.100	ND	115	70-130	3.99	20	
1,3,5-Trimethylbenzene	0.116	0.00200	"	0.100	ND	116	70-130	4.34	20	
Benzene	0.108	0.00200	"	0.100	ND	108	70-130	2.81	20	
Ethylbenzene	0.109	0.00200	"	0.100	ND	109	70-130	2.81	20	
Naphthalene	0.110	0.00380	"	0.100	0.00136	109	70-130	7.84	20	
Toluene	0.108	0.00200	"	0.100	ND	108	70-130	2.98	20	
o-Xylene	0.111	0.00200	"	0.100	ND	111	70-130	3.14	20	
m,p-Xylene	0.220	0.00400	"	0.200	ND	110	70-130	2.47	20	
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		104	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		99.4	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		102	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3E0813 - EPA 3550B										
Blank (B3E0813-BLK1)					Prepared: 05/08/2023 Analyzed: 05/08/2023					
Diesel (C10-C28)	ND	25.0	mg/kg							U
Residual Range Organics (C28-C40)	ND	100	"							U
Surrogate: o-Terphenyl	22		"	24.9		89.6	50-150			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Extractable Petroleum Hydrocarbons by 8015D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B3E0813 - EPA 3550B

LCS (B3E0813-BS1)

Prepared: 05/08/2023 Analyzed: 05/08/2023

Diesel (C10-C28)	878	50.0	mg/kg	1000		87.8	70-130			
Residual Range Organics (C28-C40)	967	200	"	1000		96.7	70-130			
Surrogate: o-Terphenyl	51		"	49.8		103	50-150			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Extractable Petroleum Hydrocarbons by 8015D - Quality Control Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B3E0813 - EPA 3550B

Matrix Spike (B3E0813-MS1)		Source: Y305190-01			Prepared: 05/08/2023 Analyzed: 05/08/2023					
Diesel (C10-C28)	902	50.0	mg/kg	1000	ND	90.2	70-130			
Residual Range Organics (C28-C40)	973	200	"	1000	ND	97.3	70-130			
Surrogate: o-Terphenyl	44		"	49.8		88.8	50-150			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Extractable Petroleum Hydrocarbons by 8015D - Quality Control Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B3E0813 - EPA 3550B

Matrix Spike Dup (B3E0813-MSD1)		Source: Y305190-01			Prepared: 05/08/2023 Analyzed: 05/08/2023					
Diesel (C10-C28)	859	50.0	mg/kg	1000	ND	85.9	70-130	4.85	35	
Residual Range Organics (C28-C40)	933	200	"	1000	ND	93.3	70-130	4.29	35	
Surrogate: o-Terphenyl	48		"	49.8		96.4	50-150			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Extractable Petroleum Hydrocarbons by 8015D - Quality Control

Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Metals by EPA 6000/7000 Series Methods - Quality Control

Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B3E0927 - EPA 3050B

Blank (B3E0927-BLK1)

Prepared: 05/09/2023 Analyzed: 05/12/2023

Arsenic	ND	0.000100	mg/kg
Barium	ND	0.0100	"
Cadmium	ND	0.000100	"
Copper	ND	0.0100	"
Lead	ND	0.0100	"
Nickel	ND	0.0100	"
Selenium	ND	0.000100	"
Silver	ND	0.000100	"
Zinc	ND	0.100	"

LCS (B3E0927-BS1)

Prepared: 05/09/2023 Analyzed: 05/12/2023

Arsenic	0.0529	0.000100	mg/kg	0.0500	106	80-120
Barium	5.60	0.0100	"	5.00	112	80-120
Cadmium	0.0532	0.000100	"	0.0500	106	80-120
Copper	0.540	0.0100	"	0.500	108	80-120
Lead	0.0516	0.0100	"	0.0500	103	80-120
Nickel	0.0514	0.0100	"	0.0500	103	80-120
Selenium	0.0572	0.000100	"	0.0500	114	80-120
Silver	0.0527	0.000100	"	0.0500	105	80-120
Zinc	0.533	0.100	"	0.500	107	80-120

Matrix Spike (B3E0927-MS1)

Source: Y305245-01

Prepared: 05/09/2023 Analyzed: 05/12/2023

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Metals by EPA 6000/7000 Series Methods - Quality Control

Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B3E0927 - EPA 3050B

Matrix Spike (B3E0927-MS1)		Source: Y305245-01			Prepared: 05/09/2023 Analyzed: 05/12/2023					
Arsenic	12.5	0.0870	mg/kg	4.35	8.04	103	75-125			
Barium	861	8.70	"	435	75.4	181	75-125			QM-07
Cadmium	4.80	0.0870	"	4.35	0.154	107	75-125			
Copper	53.3	8.70	"	43.5	12.3	94.4	75-125			
Lead	15.1	8.70	"	4.35	11.5	83.3	75-125			
Nickel	19.2	8.70	"	4.35	16.2	69.4	75-125			QM-07
Selenium	5.06	0.0870	"	4.35	0.443	106	75-125			
Silver	4.64	0.0870	"	4.35	0.0627	105	75-125			
Zinc	94.1	87.0	"	43.5	52.5	95.7	75-125			
Matrix Spike Dup (B3E0927-MSD1)		Source: Y305245-01			Prepared: 05/09/2023 Analyzed: 05/12/2023					
Arsenic	13.3	0.0847	mg/kg	4.24	8.04	124	75-125	5.96	20	
Barium	535	8.47	"	424	75.4	108	75-125	46.8	20	QR-DUP
Cadmium	4.56	0.0847	"	4.24	0.154	104	75-125	5.14	20	
Copper	51.6	8.47	"	42.4	12.3	92.9	75-125	3.27	20	
Lead	15.5	8.47	"	4.24	11.5	93.4	75-125	2.17	20	
Nickel	18.9	8.47	"	4.24	16.2	65.5	75-125	1.30	20	QM-07
Selenium	5.41	0.0847	"	4.24	0.443	117	75-125	6.66	20	
Silver	4.39	0.0847	"	4.24	0.0627	102	75-125	5.55	20	
Zinc	91.9	84.7	"	42.4	52.5	92.9	75-125	2.44	20	

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Classical Chemistry Parameters - Quality Control Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B3E0804 - Saturated Paste Metals

Blank (B3E0804-BLK1)

Prepared: 05/08/2023 Analyzed: 05/10/2023

SAR	0.00		SAR
Calcium PPM	ND	10.0	mg/L
Magnesium PPM	ND	10.0	"
Sodium PPM	ND	10.0	"

Duplicate (B3E0804-DUP1)

Source: Y305128-01

Prepared: 05/08/2023 Analyzed: 05/10/2023

SAR	0.00		SAR	5.28	200	200
Calcium PPM	131	10.0	mg/L	152	14.8	50
Magnesium PPM	51.2	10.0	"	59.3	14.7	50
Sodium PPM	264	10.0	"	303	13.9	50

Batch B3E0808 - DTPA Sorbitol Preparation

Blank (B3E0808-BLK1)

Prepared: 05/08/2023 Analyzed: 05/09/2023

Boron	ND	0.100	mg/L
-------	----	-------	------

Duplicate (B3E0808-DUP1)

Source: Y305128-01

Prepared: 05/08/2023 Analyzed: 05/09/2023

Boron	0.709	0.100	mg/L	0.724	2.01	50
-------	-------	-------	------	-------	------	----

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Saturated Paste - Quality Control Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3E0810 - Saturated Paste pH/EC										
Blank (B3E0810-BLK1)					Prepared: 05/08/2023 Analyzed: 05/09/2023					
Specific Conductance (EC)	ND	0.00500	mmhos/cm							
Duplicate (B3E0810-DUP1)					Source: Y305128-01 Prepared: 05/08/2023 Analyzed: 05/09/2023					
pH	7.79		pH Units		7.85			0.767	25	
Specific Conductance (EC)	1.85	0.00500	mmhos/cm		2.08			11.6	25	

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

PAH by 8270D SIM - Quality Control
Waypoint Analytical, LLC.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch L681023 - 3550B

MSD (L 91447-MSD-L681023)		Source: 91447			Prepared: 05/10/2023 Analyzed: 05/10/2023					
Indeno(1,2,3-cd)pyrene	0.046	0.00067	mg/Kg	0.165	<0.000627	27.8	30-130	19.6	30	*
Benzo(b)fluoranthene	0.0564	0.00067	"	0.165	<0.000585	34.1	30-130	13.8	30	
Naphthalene	0.0658	0.00201	"	0.165	<0.00145	39.8	30-130	12.6	30	
Benzo(a)anthracene	0.0775	0.00067	"	0.165	<0.000493	46.9	30-130	12.8	30	
1-Methylnaphthalene	0.0733	0.00201	"	0.165	<0.00109	44.4	30-130	15.1	30	
2-Methylnaphthalene	0.0586	0.00201	"	0.165	<0.00194	35.5	30-130	9.8	30	
Chrysene	0.0868	0.00067	"	0.165	<0.000624	52.6	30-130	12.8	30	
Anthracene	0.0696	0.00067	"	0.165	<0.000334	42.1	30-130	25.3	30	
Fluorene	0.0576	0.00067	"	0.165	<0.000286	34.9	30-130	5	30	
Benzo(a)pyrene	0.0806	0.00067	"	0.165	<0.000468	48.8	30-130	10.1	30	
Pyrene	0.0876	0.00067	"	0.165	<0.000643	53	30-130	16.1	30	
Benzo(k)fluoranthene	0.0933	0.00067	"	0.165	<0.000437	56.5	30-130	15.5	30	
Dibenz(a,h)anthracene	0.069	0.00067	"	0.165	<0.000614	41.8	30-130	15.6	30	
Fluoranthene	0.0864	0.00067	"	0.165	<0.000394	52.3	30-130	17.5	30	
Acenaphthene	0.0673	0.00067	"	0.165	<0.000304	40.7	30-130	11.2	30	
Surrogate: Nitrobenzene-d5	40.3		"	0.33	184	40.3	29-110			
Surrogate: 2-Fluorobiphenyl	36.3		"	0.33	151	36.3	33-115			
Surrogate: 4-Terphenyl-d14	51.8		"	0.33	226	51.8	33-122			

MS (L 91447-MS-L681023)		Source: 91447			Prepared: 05/10/2023 Analyzed: 05/10/2023					
Indeno(1,2,3-cd)pyrene	0.056	0.00067	mg/Kg	0.164	<0.000627	34.1	30-130			
Naphthalene	0.0747	0.00201	"	0.164	<0.00145	45.5	30-130			
Anthracene	0.0898	0.00067	"	0.164	<0.000334	54.7	30-130			
Pyrene	0.103	0.00067	"	0.164	<0.000643	62.8	30-130			
1-Methylnaphthalene	0.0853	0.00201	"	0.164	<0.00109	52	30-130			
2-Methylnaphthalene	0.0647	0.00201	"	0.164	<0.00194	39.4	30-130			
Acenaphthene	0.0753	0.00067	"	0.164	<0.000304	45.9	30-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

PAH by 8270D SIM - Quality Control
Waypoint Analytical, LLC.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch L681023 - 3550B

MS (L 91447-MS-L681023)		Source: 91447			Prepared: 05/10/2023 Analyzed: 05/10/2023					
Fluorene	0.0606	0.00067	mg/Kg	0.164	<0.000286	36.9	30-130			
Benzo(a)anthracene	0.0881	0.00067	"	0.164	<0.000493	53.7	30-130			
Benzo(a)pyrene	0.0892	0.00067	"	0.164	<0.000468	54.3	30-130			
Benzo(b)fluoranthene	0.0648	0.00067	"	0.164	<0.000585	39.5	30-130			
Benzo(k)fluoranthene	0.109	0.00067	"	0.164	<0.000437	66.4	30-130			
Chrysene	0.0987	0.00067	"	0.164	<0.000624	60.1	30-130			
Dibenz(a,h)anthracene	0.0807	0.00067	"	0.164	<0.000614	49.2	30-130			
Fluoranthene	0.103	0.00067	"	0.164	<0.000394	62.8	30-130			
Surrogate: Nitrobenzene-d5	45.5		"	0.329	184	45.5	29-110			
Surrogate: 2-Fluorobiphenyl	41.9		"	0.329	151	41.9	33-115			
Surrogate: 4-Terphenyl-d14	86		"	0.329	226	86	33-122			

LCS (LCS-L681023)		Prepared: 05/10/2023 Analyzed: 05/10/2023								
Indeno(1,2,3-cd)pyrene	0.0582	0.00067	mg/Kg	0.167		34.8	30-130			
Pyrene	0.102	0.00067	"	0.167		61	30-130			
Naphthalene	0.0749	0.00201	"	0.167		44.8	30-130			
2-Methylnaphthalene	0.0656	0.00201	"	0.167		39.2	30-130			
Fluorene	0.065	0.00067	"	0.167		38.9	30-130			
Benzo(b)fluoranthene	0.0754	0.00067	"	0.167		45.1	30-130			
Benzo(a)pyrene	0.0927	0.00067	"	0.167		55.5	30-130			
Benzo(a)anthracene	0.0829	0.00067	"	0.167		49.6	30-130			
Anthracene	0.0841	0.00067	"	0.167		50.3	30-130			
1-Methylnaphthalene	0.0832	0.00201	"	0.167		49.8	30-130			
Benzo(k)fluoranthene	0.108	0.00067	"	0.167		64.6	30-130			
Chrysene	0.105	0.00067	"	0.167		62.8	30-130			
Dibenz(a,h)anthracene	0.0783	0.00067	"	0.167		46.8	30-130			
Fluoranthene	0.101	0.00067	"	0.167		60.4	30-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

PAH by 8270D SIM - Quality Control Waypoint Analytical, LLC.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch L681023 - 3550B

LCS (LCS-L681023)

Prepared: 05/10/2023 Analyzed: 05/10/2023

Acenaphthene	0.0772	0.00067	mg/Kg	0.167		46.2	30-130			
Surrogate: Nitrobenzene-d5	51.9		"	0.333		51.9	29-110			
Surrogate: 4-Terphenyl-d14	66		"	0.333		66	33-122			
Surrogate: 2-Fluorobiphenyl	46.2		"	0.333		46.2	33-115			

LRB (LRB-L681023)

Prepared: 05/10/2023 Analyzed: 05/10/2023

Dibenz(a,h)anthracene	ND	0.00067	mg/Kg				-			
Indeno(1,2,3-cd)pyrene	ND	0.00067	"				-			
Pyrene	ND	0.00067	"				-			
Naphthalene	ND	0.00201	"				-			
Anthracene	ND	0.00067	"				-			
1-Methylnaphthalene	ND	0.00201	"				-			
2-Methylnaphthalene	ND	0.00201	"				-			
Fluorene	ND	0.00067	"				-			
Acenaphthene	ND	0.00067	"				-			
Benzo(a)anthracene	ND	0.00067	"				-			
Benzo(a)pyrene	ND	0.00067	"				-			
Benzo(b)fluoranthene	ND	0.00067	"				-			
Benzo(k)fluoranthene	ND	0.00067	"				-			
Chrysene	ND	0.00067	"				-			
Fluoranthene	ND	0.00067	"				-			
Surrogate: Nitrobenzene-d5	53.7		"	0.333		53.7	29-110			
Surrogate: 2-Fluorobiphenyl	47.4		"	0.333		47.4	33-115			
Surrogate: 4-Terphenyl-d14	64.2		"	0.333		64.2	33-122			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Total Metals by 7196A - Quality Control Waypoint Analytical, LLC.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch L681380 -										
DUP (L 91379-DUP)		Source: Y305211-01			Prepared: Analyzed: 05/11/2023					
Chromium, Hexavalent	ND	0.5	mg/Kg		<0.500	-		0	20	
MS (L 91379-MS)		Source: Y305211-01			Prepared: Analyzed: 05/11/2023					
Chromium, Hexavalent	30.4	2.5	mg/Kg	39.9	<1.22	76	75-125			
LCS (LCS)					Prepared: Analyzed: 05/11/2023					
Chromium, Hexavalent	6.43	0.5	mg/Kg	8		80	75-125			
LRB (LRB)					Prepared: Analyzed: 05/11/2023					
Chromium, Hexavalent	ND	0.5	mg/Kg				-			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Notes and Definitions

U Sample is Non-Detect.

QR-DUP RPD exceeds QC acceptance criteria, this indicates source sample is not homogenous.

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

* QC Failure

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported on a wet weight basis.

Calculated results may use J-flag data (instead of reported "ND") as part of calculation to provide a more accurate result.

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

May 26, 2023

Ensolum

Jeremy Espinoza

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

Project Name - KMG - Newby State 30N-34Hz

Project Number - 09A1417352

Attached are your analytical results for KMG - Newby State 30N-34Hz received by Origins Laboratory, Inc. May 18, 2023. This project is associated with Origins project number Y305496-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com



Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS05@2'	Y305496-01	Soil	May 18, 2023 11:30	05/18/2023 17:36
SS05@4'	Y305496-02	Soil	May 18, 2023 11:35	05/18/2023 17:36
SS05@6'	Y305496-03	Soil	May 18, 2023 11:40	05/18/2023 17:36
SS06@2'	Y305496-04	Soil	May 18, 2023 11:45	05/18/2023 17:36
SS06@4'	Y305496-05	Soil	May 18, 2023 11:50	05/18/2023 17:36
SS06@6'	Y305496-06	Soil	May 18, 2023 11:55	05/18/2023 17:36
SS07@2'	Y305496-07	Soil	May 18, 2023 12:00	05/18/2023 17:36
SS07@4'	Y305496-08	Soil	May 18, 2023 12:05	05/18/2023 17:36
SS07@6'	Y305496-09	Soil	May 18, 2023 12:10	05/18/2023 17:36
SS08@2'	Y305496-10	Soil	May 18, 2023 12:15	05/18/2023 17:36
SS08@4'	Y305496-11	Soil	May 18, 2023 12:20	05/18/2023 17:36
SS08@6'	Y305496-12	Soil	May 18, 2023 12:25	05/18/2023 17:36
SS09@2'	Y305496-13	Soil	May 18, 2023 12:30	05/18/2023 17:36
SS09@4'	Y305496-14	Soil	May 18, 2023 12:35	05/18/2023 17:36

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS09@6'	Y305496-15	Soil	May 18, 2023 12:40	05/18/2023 17:36
Native - BG01@0.25'	Y305496-16	Soil	May 18, 2023 12:45	05/18/2023 17:36
Native - BG01@3'	Y305496-17	Soil	May 18, 2023 12:50	05/18/2023 17:36
Native - BG02@0.25'	Y305496-18	Soil	May 18, 2023 12:55	05/18/2023 17:36
Native - BG02@3'	Y305496-19	Soil	May 18, 2023 13:00	05/18/2023 17:36
Native - BG03@0.25'	Y305496-20	Soil	May 18, 2023 13:05	05/18/2023 17:36
Native - BG03@3'	Y305496-21	Soil	May 18, 2023 13:10	05/18/2023 17:36
Native - BG04@0.25'	Y305496-22	Soil	May 18, 2023 13:15	05/18/2023 17:36
Native - BG04@3'	Y305496-23	Soil	May 18, 2023 13:20	05/18/2023 17:36

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

Jeremy Espinoza

Project Number: 09A1417352

Project: KMG - Newby State 30N-34Hz

1725 Elk Place | Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

ORIGINS
LABORATORY, INC

IMPACTED

www.originslaboratory.com

page 1 of 3

Client: Ensolum

Address:

Telephone Number:

Email Address: KMG Team

Project Manager: Jeremy Espinoza

Project Name: Newby 30N-34Hz

Project Number: 09A1417352

Samples Collected By: FS

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative			Matrix		Analysis										Sample Instructions		
				Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	Air Summa Canister #	Other	BTEX	TMBs	TPH (ORO)	PAHs	EC, SAR	Boron	Arsenic		Barium	Cadmium
5505a21	5/8/23	1130	3	X				X			X	X	X	X	X	X	X	X	X	X	
5505a41		1135																			
5505a61		1140																			
5506a21		1145																			
5506a41		1150																			
5506a61		1155																			
5507a21		1200																			
5507a41		1205																			
5507a61		1210																			
5508a21	5/8/23	1215	1	X				X			X	X	X	X	X	X	X	X	X	X	
Relinquished By:	Date:	Time:	Received By:	Date:	Time:															Turnaround Time:	
Relinquished By:	5/8/23	1736	CHS	5/8/23	1736															Same Day <input checked="" type="checkbox"/> 24 Hr <input type="checkbox"/>	
																				48 Hr <input type="checkbox"/> 72 Hr <input type="checkbox"/>	
																				Standard <input type="checkbox"/>	

Temp Received: 15

Date Results Needed

Origins Laboratory, Inc.

Jen Pellegrini

Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

1725 Elk Place | Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

ORIGINS
LABORATORY, INC

IMPACTED

4305496

page 3 of 3

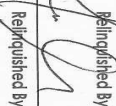
www.originslaboratory.com

Client: Ensolum
Project Manager: Jeremy Espinoza
Address: _____
Project Name: Newby 30N-34Hz
Telephone Number: _____
Project Number: 09A1417352
Email Address: KMG Team
Samples Collected by: ES

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative			Matrix			Analysis			Sample Instructions	
				Unpreserved	HCl	HNO ₃	Other	Groundwater	Soil	Air Summa Canister #	Other	pH, EC, SAR		Boron
Native - B003031	5/18/23	1310	2	X				X			X	X		1
Native - B00400251	1315	2	X					X			X	X		2
Native - B0040031	1320	2	X					X			X	X		3
														4
														5
														6
														7
														8
														9
														10

Temp Received: 15

Date Results Needed

Requisitioned By: 

Date: 5/18/23

Time: 1730

Received By: CHS

Date: 5/18/23

Time: 1730

Turnaround Time:
☒ Same Day
☐ 24 Hr
☐ 48 Hr
☐ 72 Hr
☐ Standard



Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

Jeremy Espinoza

Project Number: 09A1417352

Project: KMG - Newby State 30N-34Hz

Origins Laboratory

F-012207-01-R1
Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: 4305496

Client: Ensolum

Client Project ID: Newby 30N-34Hz

Checklist Completed by: EHS/TSH

Shipped Via: HD

(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 5/18/23

Airbill #: NA

Matrix(s) Received: (Check all that apply): X Soil/Solid Water Other:

Cooler Number/Temperature: 1 / 15 °C / °C / °C (Describe)

Thermometer ID: T003

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?	<u>/</u>	<u>/ EHS</u>		<u>SD</u>
Is there ice present (document if blue ice is used)	<u>/</u>			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		<u>/</u>		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		<u>/</u>		
Were all samples received intact ⁽¹⁾ ?		<u>/</u>		
Was adequate sample volume provided ⁽¹⁾ ?	<u>/</u>			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?		<u>/</u>		
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	<u>/</u>			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<u>/</u>			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<u>/</u>			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	<u>/</u>			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.			<u>/</u>	
Are samples preserved that require preservation and was it checked ⁽¹⁾ ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH <2 for samples preserved with HNO ₃ , HCL, H ₂ SO ₄) / (pH >10 for samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH)		<u>/</u>		
Additional Comments (if any): <u>One container for SS07 @ 2" was broken.</u>				

⁽¹⁾If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

EHS
Reviewed by (Project Manager)

5/18/23
Date/Time Reviewed

Origins Laboratory, Inc.

Jen Pellegrini

Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS05@2'

5/18/2023 11:30:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-01 (Soil)

Boron (DTPA Sorbitol)

Boron	0.603	0.0994	mg/L	1	B3E1904	05/19/2023	05/22/2023	
-------	-------	--------	------	---	---------	------------	------------	--

DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B3E1832	05/18/2023	05/19/2023	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl	68.1 %	50-150	"	"	"
------------------------	--------	--------	---	---	---

GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg	1	B3E1834	05/18/2023	05/19/2023	U
1,3,5-Trimethylbenzene	ND	0.00200	"	"	"	"	"	U
Benzene	ND	0.00200	"	"	"	"	"	U
Ethylbenzene	ND	0.00200	"	"	"	"	"	U
Toluene	ND	0.00200	"	"	"	"	"	U
Xylenes, total	ND	0.00200	"	"	"	"	"	U
Gasoline Range Hydrocarbons	ND	0.200	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	101 %	70-130	"	"	"
----------------------------------	-------	--------	---	---	---

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini, Project Manager

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS05@2'

5/18/2023 11:30:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-01 (Soil)

GBTEX+TMBs by 8260D

Surrogate: Toluene-d8	91.4 %	70-130	B3E18 34	05/18/2023	05/19/2023
Surrogate: 4-Bromofluorobenzene	95.8 %	70-130	"	"	"

Metals by Saturated Paste by EPA 6010

Calcium	2.45	0.499	meq/L	10	[CALC]	05/20/2023	05/22/2023
Magnesium	1.56	0.823	"	"	"	"	"
Sodium	1.57	0.435	"	"	"	"	"

PAH by 8270D SIM

1-Methylnaphthalene	ND	0.00109	0.00201	mg/Kg	1	L683640	05/23/2023	05/24/2023
2-Methylnaphthalene	ND	0.00194	0.00201	"	"	"	"	"
Acenaphthene	ND	0.000304	0.00067	"	"	"	"	"
Anthracene	ND	0.000334	0.00067	"	"	"	"	"
Benzo(a)anthracene	ND	0.000493	0.00067	"	"	"	"	"
Benzo(a)pyrene	ND	0.000468	0.00067	"	"	"	"	"
Benzo(b)fluoranthene	ND	0.000585	0.00067	"	"	"	"	"
Benzo(k)fluoranthene	ND	0.000437	0.00067	"	"	"	"	"
Chrysene	ND	0.000624	0.00067	"	"	"	"	"
Dibenz(a,h)anthracene	ND	0.000614	0.00067	"	"	"	"	"
Fluoranthene	ND	0.000394	0.00067	"	"	"	"	"

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS05@2'

5/18/2023 11:30:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Waypoint Analytical, LLC. Y305496-01 (Soil)

PAH by 8270D SIM

Fluorene	ND	0.000286	0.00067	mg/Kg	1	L683640	05/23/2023	05/24/2023
Indeno(1,2,3-cd)pyrene	ND	0.000627	0.00067	"	"	"	"	"
Naphthalene	ND	0.00145	0.00201	"	"	"	"	"
Pyrene	ND	0.000643	0.00067	"	"	"	"	"

Surrogate: 2-Fluorobiphenyl	52.6 %	33-115	"	"	"
Surrogate: 4-Terphenyl-d14	65.3 %	33-122	"	"	"
Surrogate: Nitrobenzene-d5	52 %	29-110	"	"	"

SAR by 20B Saturated Paste

SAR	1.11	SAR	1	B3E2006	05/20/2023	05/22/2023
-----	------	-----	---	---------	------------	------------

Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.540	0.00500	mmhos/cm	1	B3E2007	05/20/2023	05/21/2023
---------------------------	-------	---------	----------	---	---------	------------	------------

Table 915 metals by EPA 6020B

Arsenic	6.03	0.0858	mg/kg	10	B3E1831	05/18/2023	05/19/2023
Barium	164	8.58	"	"	"	"	"
Cadmium	0.191	0.0858	"	"	"	"	"
Selenium	0.269	0.0858	"	"	"	"	"

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS05@4'

5/18/2023 11:35:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-02 (Soil)

Boron (DTPA Sorbitol)

Boron	0.460	0.100	mg/L	1	B3E1904	05/19/2023	05/22/2023	
-------	-------	-------	------	---	---------	------------	------------	--

DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B3E1832	05/18/2023	05/19/2023	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl	64.0 %	50-150			"	"	"	
------------------------	--------	--------	--	--	---	---	---	--

GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg	1	B3E1834	05/18/2023	05/19/2023	U
1,3,5-Trimethylbenzene	ND	0.00200	"	"	"	"	"	U
Benzene	ND	0.00200	"	"	"	"	"	U
Ethylbenzene	ND	0.00200	"	"	"	"	"	U
Toluene	ND	0.00200	"	"	"	"	"	U
Xylenes, total	ND	0.00200	"	"	"	"	"	U
Gasoline Range Hydrocarbons	ND	0.200	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	103 %	70-130			"	"	"	
----------------------------------	-------	--------	--	--	---	---	---	--

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini, Project Manager

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS05@4'

5/18/2023 11:35:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-02 (Soil)

GBTEX+TMBs by 8260D

Surrogate: Toluene-d8	100 %	70-130	B3E18 34	05/18/2023	05/19/2023
Surrogate: 4-Bromofluorobenzene	89.9 %	70-130	"	"	"

Metals by Saturated Paste by EPA 6010

Calcium	4.53	0.499	meq/L	10	[CALC]	05/20/2023	05/22/2023
Magnesium	2.33	0.823	"	"	"	"	"
Sodium	1.55	0.435	"	"	"	"	"

PAH by 8270D SIM

1-Methylnaphthalene	ND	0.00109	0.00201	mg/Kg	1	L683640	05/23/2023	05/24/2023
2-Methylnaphthalene	ND	0.00194	0.00201	"	"	"	"	"
Acenaphthene	ND	0.000304	0.00067	"	"	"	"	"
Anthracene	ND	0.000334	0.00067	"	"	"	"	"
Benzo(a)anthracene	ND	0.000493	0.00067	"	"	"	"	"
Benzo(a)pyrene	ND	0.000468	0.00067	"	"	"	"	"
Benzo(b)fluoranthene	ND	0.000585	0.00067	"	"	"	"	"
Benzo(k)fluoranthene	ND	0.000437	0.00067	"	"	"	"	"
Chrysene	ND	0.000624	0.00067	"	"	"	"	"
Dibenz(a,h)anthracene	ND	0.000614	0.00067	"	"	"	"	"
Fluoranthene	ND	0.000394	0.00067	"	"	"	"	"

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS05@4'

5/18/2023 11:35:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Waypoint Analytical, LLC. Y305496-02 (Soil)

PAH by 8270D SIM

Fluorene	ND	0.000286	0.00067	mg/Kg	1	L683640	05/23/2023	05/24/2023
Indeno(1,2,3-cd)pyrene	ND	0.000627	0.00067	"	"	"	"	"
Naphthalene	ND	0.00145	0.00201	"	"	"	"	"
Pyrene	ND	0.000643	0.00067	"	"	"	"	"

Surrogate: 2-Fluorobiphenyl	53.4 %	33-115	"	"	"
Surrogate: 4-Terphenyl-d14	67.5 %	33-122	"	"	"
Surrogate: Nitrobenzene-d5	55.8 %	29-110	"	"	"

SAR by 20B Saturated Paste

SAR	0.837	SAR	1	B3E2006	05/20/2023	05/22/2023
-----	-------	-----	---	---------	------------	------------

Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.882	0.00500	mmhos/cm	1	B3E2007	05/20/2023	05/21/2023
---------------------------	-------	---------	----------	---	---------	------------	------------

Table 915 metals by EPA 6020B

Arsenic	6.30	0.0940	mg/kg	10	B3E1831	05/18/2023	05/19/2023
Barium	174	9.40	"	"	"	"	"
Cadmium	0.171	0.0940	"	"	"	"	"
Selenium	0.262	0.0940	"	"	"	"	"

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS05@6'

5/18/2023 11:40:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-03 (Soil)

Boron (DTPA Sorbitol)

Boron	0.483	0.0995	mg/L	1	B3E1904	05/19/2023	05/22/2023	
-------	-------	--------	------	---	---------	------------	------------	--

DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B3E1832	05/18/2023	05/19/2023	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl	64.7 %	50-150	"	"	"
------------------------	--------	--------	---	---	---

GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg	1	B3E1834	05/18/2023	05/19/2023	U
1,3,5-Trimethylbenzene	ND	0.00200	"	"	"	"	"	U
Benzene	ND	0.00200	"	"	"	"	"	U
Ethylbenzene	ND	0.00200	"	"	"	"	"	U
Toluene	ND	0.00200	"	"	"	"	"	U
Xylenes, total	ND	0.00200	"	"	"	"	"	U
Gasoline Range Hydrocarbons	ND	0.200	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	102 %	70-130	"	"	"
----------------------------------	-------	--------	---	---	---

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini, Project Manager

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS05@6'

5/18/2023 11:40:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-03 (Soil)

GBTEX+TMBs by 8260D

Surrogate: Toluene-d8	97.0 %	70-130	B3E18 34	05/18/2023	05/19/2023
Surrogate: 4-Bromofluorobenzene	90.5 %	70-130	"	"	"

Metals by Saturated Paste by EPA 6010

Calcium	2.76	0.499	meq/L	10	[CALC]	05/20/2023	05/22/2023
Magnesium	1.40	0.823	"	"	"	"	"
Sodium	1.43	0.435	"	"	"	"	"

PAH by 8270D SIM

1-Methylnaphthalene	ND	0.00109	0.00201	mg/Kg	1	L683640	05/23/2023	05/24/2023
2-Methylnaphthalene	ND	0.00194	0.00201	"	"	"	"	"
Acenaphthene	ND	0.000304	0.00067	"	"	"	"	"
Anthracene	ND	0.000334	0.00067	"	"	"	"	"
Benzo(a)anthracene	ND	0.000493	0.00067	"	"	"	"	"
Benzo(a)pyrene	ND	0.000468	0.00067	"	"	"	"	"
Benzo(b)fluoranthene	ND	0.000585	0.00067	"	"	"	"	"
Benzo(k)fluoranthene	ND	0.000437	0.00067	"	"	"	"	"
Chrysene	ND	0.000624	0.00067	"	"	"	"	"
Dibenz(a,h)anthracene	ND	0.000614	0.00067	"	"	"	"	"
Fluoranthene	ND	0.000394	0.00067	"	"	"	"	"

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS05@6'

5/18/2023 11:40:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Waypoint Analytical, LLC.
Y305496-03 (Soil)

PAH by 8270D SIM

Fluorene	ND	0.000286	0.00067	mg/Kg	1	L683640	05/23/2023	05/24/2023
Indeno(1,2,3-cd)pyrene	ND	0.000627	0.00067	"	"	"	"	"
Naphthalene	ND	0.00145	0.00201	"	"	"	"	"
Pyrene	ND	0.000643	0.00067	"	"	"	"	"

Surrogate: 2-Fluorobiphenyl	46.5 %	33-115	"	"	"
Surrogate: 4-Terphenyl-d14	61.3 %	33-122	"	"	"
Surrogate: Nitrobenzene-d5	47.1 %	29-110	"	"	"

SAR by 20B Saturated Paste

SAR	0.989	SAR	1	B3E2006	05/20/2023	05/22/2023
-----	-------	-----	---	---------	------------	------------

Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.650	0.00500	mmhos/cm	1	B3E2007	05/20/2023	05/21/2023
---------------------------	-------	---------	----------	---	---------	------------	------------

Table 915 metals by EPA 6020B

Arsenic	5.78	0.0906	mg/kg	10	B3E1831	05/18/2023	05/19/2023
Barium	135	9.06	"	"	"	"	"
Cadmium	0.150	0.0906	"	"	"	"	"
Selenium	0.273	0.0906	"	"	"	"	05/20/2023

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS06@2'

5/18/2023 11:45:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-04 (Soil)

Boron (DTPA Sorbitol)

Boron	0.667	0.0994	mg/L	1	B3E1904	05/19/2023	05/22/2023	
-------	-------	--------	------	---	---------	------------	------------	--

DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B3E1832	05/18/2023	05/19/2023	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl	63.4 %	50-150			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg	1	B3E1834	05/18/2023	05/19/2023	U
1,3,5-Trimethylbenzene	ND	0.00200	"	"	"	"	"	U
Benzene	ND	0.00200	"	"	"	"	"	U
Ethylbenzene	ND	0.00200	"	"	"	"	"	U
Toluene	ND	0.00200	"	"	"	"	"	U
Xylenes, total	ND	0.00200	"	"	"	"	"	U
Gasoline Range Hydrocarbons	ND	0.200	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	101 %	70-130			"	"	"
----------------------------------	-------	--------	--	--	---	---	---

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini, Project Manager

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS06@2'

5/18/2023 11:45:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-04 (Soil)

GBTEX+TMBs by 8260D

Surrogate: Toluene-d8	93.7 %	70-130	B3E18 34	05/18/2023	05/19/2023
Surrogate: 4-Bromofluorobenzene	93.1 %	70-130	"	"	"

Metals by Saturated Paste by EPA 6010

Calcium	1.98	0.499	meq/L	10	[CALC]	05/20/2023	05/22/2023
Magnesium	1.48	0.823	"	"	"	"	"
Sodium	2.10	0.435	"	"	"	"	"

PAH by 8270D SIM

1-Methylnaphthalene	ND	0.00109	0.00201	mg/Kg	1	L683640	05/23/2023	05/24/2023
2-Methylnaphthalene	ND	0.00194	0.00201	"	"	"	"	"
Acenaphthene	ND	0.000304	0.00067	"	"	"	"	"
Anthracene	ND	0.000334	0.00067	"	"	"	"	"
Benzo(a)anthracene	ND	0.000493	0.00067	"	"	"	"	"
Benzo(a)pyrene	ND	0.000468	0.00067	"	"	"	"	"
Benzo(b)fluoranthene	ND	0.000585	0.00067	"	"	"	"	"
Benzo(k)fluoranthene	ND	0.000437	0.00067	"	"	"	"	"
Chrysene	ND	0.000624	0.00067	"	"	"	"	"
Dibenz(a,h)anthracene	ND	0.000614	0.00067	"	"	"	"	"
Fluoranthene	ND	0.000394	0.00067	"	"	"	"	"

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS06@2'

5/18/2023 11:45:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Waypoint Analytical, LLC. Y305496-04 (Soil)

PAH by 8270D SIM

Fluorene	ND	0.000286	0.00067	mg/Kg	1	L683640	05/23/2023	05/24/2023
Indeno(1,2,3-cd)pyrene	ND	0.000627	0.00067	"	"	"	"	"
Naphthalene	ND	0.00145	0.00201	"	"	"	"	"
Pyrene	ND	0.000643	0.00067	"	"	"	"	"

Surrogate: 2-Fluorobiphenyl	47.6 %	33-115	"	"	"
Surrogate: 4-Terphenyl-d14	66.4 %	33-122	"	"	"
Surrogate: Nitrobenzene-d5	50.6 %	29-110	"	"	"

SAR by 20B Saturated Paste

SAR	1.60	SAR	1	B3E2006	05/20/2023	05/22/2023
-----	------	-----	---	---------	------------	------------

Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.542	0.00500	mmhos/cm	1	B3E2007	05/20/2023	05/21/2023
---------------------------	-------	---------	----------	---	---------	------------	------------

Table 915 metals by EPA 6020B

Arsenic	6.18	0.0891	mg/kg	10	B3E1831	05/18/2023	05/19/2023
Barium	221	8.91	"	"	"	"	"
Cadmium	0.207	0.0891	"	"	"	"	"
Selenium	0.296	0.0891	"	"	"	"	05/20/2023

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS06@4'

5/18/2023 11:50:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc. Y305496-05 (Soil)

Boron (DTPA Sorbitol)

Boron	1.31	0.0995	mg/L	1	B3E1904	05/19/2023	05/22/2023	
-------	------	--------	------	---	---------	------------	------------	--

DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B3E1832	05/18/2023	05/19/2023	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl	67.1 %	50-150	"	"	"
------------------------	--------	--------	---	---	---

GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg	1	B3E1834	05/18/2023	05/19/2023	U
1,3,5-Trimethylbenzene	ND	0.00200	"	"	"	"	"	U
Benzene	ND	0.00200	"	"	"	"	"	U
Ethylbenzene	ND	0.00200	"	"	"	"	"	U
Toluene	ND	0.00200	"	"	"	"	"	U
Xylenes, total	ND	0.00200	"	"	"	"	"	U
Gasoline Range Hydrocarbons	ND	0.200	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	104 %	70-130	"	"	"
----------------------------------	-------	--------	---	---	---

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS06@4'

5/18/2023 11:50:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-05 (Soil)

GBTEX+TMBs by 8260D

Surrogate: Toluene-d8	97.3 %	70-130	B3E18 34	05/18/2023	05/19/2023
Surrogate: 4-Bromofluorobenzene	89.4 %	70-130	"	"	"

Metals by Saturated Paste by EPA 6010

Calcium	3.43	0.499	meq/L	10	[CALC]	05/20/2023	05/22/2023
Magnesium	1.97	0.823	"	"	"	"	"
Sodium	1.66	0.435	"	"	"	"	"

PAH by 8270D SIM

1-Methylnaphthalene	ND	0.00109	0.00201	mg/Kg	1	L683640	05/23/2023	05/24/2023
2-Methylnaphthalene	ND	0.00194	0.00201	"	"	"	"	"
Acenaphthene	ND	0.000304	0.00067	"	"	"	"	"
Anthracene	ND	0.000334	0.00067	"	"	"	"	"
Benzo(a)anthracene	ND	0.000493	0.00067	"	"	"	"	"
Benzo(a)pyrene	ND	0.000468	0.00067	"	"	"	"	"
Benzo(b)fluoranthene	ND	0.000585	0.00067	"	"	"	"	"
Benzo(k)fluoranthene	ND	0.000437	0.00067	"	"	"	"	"
Chrysene	ND	0.000624	0.00067	"	"	"	"	"
Dibenz(a,h)anthracene	ND	0.000614	0.00067	"	"	"	"	"
Fluoranthene	ND	0.000394	0.00067	"	"	"	"	"

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS06@4'

5/18/2023 11:50:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Waypoint Analytical, LLC.
Y305496-05 (Soil)

PAH by 8270D SIM

Fluorene	ND	0.000286	0.00067	mg/Kg	1	L683640	05/23/2023	05/24/2023
Indeno(1,2,3-cd)pyrene	ND	0.000627	0.00067	"	"	"	"	"
Naphthalene	ND	0.00145	0.00201	"	"	"	"	"
Pyrene	ND	0.000643	0.00067	"	"	"	"	"

Surrogate: 2-Fluorobiphenyl	57.4 %	33-115	"	"	"
Surrogate: 4-Terphenyl-d14	76.6 %	33-122	"	"	"
Surrogate: Nitrobenzene-d5	60.4 %	29-110	"	"	"

SAR by 20B Saturated Paste

SAR	1.01	SAR	1	B3E2006	05/20/2023	05/22/2023
-----	------	-----	---	---------	------------	------------

Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.660	0.00500	mmhos/cm	1	B3E2007	05/20/2023	05/21/2023
---------------------------	-------	---------	----------	---	---------	------------	------------

Table 915 metals by EPA 6020B

Arsenic	5.45	0.0939	mg/kg	10	B3E1831	05/18/2023	05/19/2023
Barium	119	9.39	"	"	"	"	"
Cadmium	0.190	0.0939	"	"	"	"	"
Selenium	0.373	0.0939	"	"	"	"	05/20/2023

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS06@6'

5/18/2023 11:55:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-06 (Soil)

Boron (DTPA Sorbitol)

Boron	0.497	0.100	mg/L	1	B3E1904	05/19/2023	05/22/2023	
-------	-------	-------	------	---	---------	------------	------------	--

DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B3E1832	05/18/2023	05/19/2023	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl	68.2 %	50-150			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg	1	B3E1834	05/18/2023	05/19/2023	U
1,3,5-Trimethylbenzene	ND	0.00200	"	"	"	"	"	U
Benzene	ND	0.00200	"	"	"	"	"	U
Ethylbenzene	ND	0.00200	"	"	"	"	"	U
Toluene	ND	0.00200	"	"	"	"	"	U
Xylenes, total	ND	0.00200	"	"	"	"	"	U
Gasoline Range Hydrocarbons	ND	0.200	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	102 %	70-130			"	"	"
----------------------------------	-------	--------	--	--	---	---	---

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini, Project Manager

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS06@6'

5/18/2023 11:55:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-06 (Soil)

GBTEX+TMBs by 8260D

Surrogate: Toluene-d8	96.5 %	70-130	B3E18 34	05/18/2023	05/19/2023
Surrogate: 4-Bromofluorobenzene	91.5 %	70-130	"	"	"

Metals by Saturated Paste by EPA 6010

Calcium	3.15	0.499	meq/L	10	[CALC]	05/20/2023	05/22/2023
Magnesium	1.65	0.823	"	"	"	"	"
Sodium	1.62	0.435	"	"	"	"	"

PAH by 8270D SIM

1-Methylnaphthalene	ND	0.00109	0.00201	mg/Kg	1	L683640	05/23/2023	05/24/2023
2-Methylnaphthalene	ND	0.00194	0.00201	"	"	"	"	"
Acenaphthene	ND	0.000304	0.00067	"	"	"	"	"
Anthracene	ND	0.000334	0.00067	"	"	"	"	"
Benzo(a)anthracene	ND	0.000493	0.00067	"	"	"	"	"
Benzo(a)pyrene	ND	0.000468	0.00067	"	"	"	"	"
Benzo(b)fluoranthene	ND	0.000585	0.00067	"	"	"	"	"
Benzo(k)fluoranthene	ND	0.000437	0.00067	"	"	"	"	"
Chrysene	ND	0.000624	0.00067	"	"	"	"	"
Dibenz(a,h)anthracene	ND	0.000614	0.00067	"	"	"	"	"
Fluoranthene	ND	0.000394	0.00067	"	"	"	"	"

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS06@6'

5/18/2023 11:55:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Waypoint Analytical, LLC.
Y305496-06 (Soil)

PAH by 8270D SIM

Fluorene	ND	0.000286	0.00067	mg/Kg	1	L683640	05/23/2023	05/24/2023
Indeno(1,2,3-cd)pyrene	ND	0.000627	0.00067	"	"	"	"	"
Naphthalene	ND	0.00145	0.00201	"	"	"	"	"
Pyrene	ND	0.000643	0.00067	"	"	"	"	"

Surrogate: 2-Fluorobiphenyl	48.2 %	33-115	"	"	"
Surrogate: 4-Terphenyl-d14	71.4 %	33-122	"	"	"
Surrogate: Nitrobenzene-d5	55.4 %	29-110	"	"	"

SAR by 20B Saturated Paste

SAR	1.04	SAR	1	B3E2006	05/20/2023	05/22/2023
-----	------	-----	---	---------	------------	------------

Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.692	0.00500	mmhos/cm	1	B3E2007	05/20/2023	05/21/2023
---------------------------	-------	---------	----------	---	---------	------------	------------

Table 915 metals by EPA 6020B

Arsenic	5.67	0.0957	mg/kg	10	B3E1831	05/18/2023	05/19/2023
Barium	119	9.57	"	"	"	"	"
Cadmium	0.138	0.0957	"	"	"	"	"
Selenium	0.314	0.0957	"	"	"	"	05/20/2023

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS07@2'

5/18/2023 12:00:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc. Y305496-07 (Soil)

Boron (DTPA Sorbitol)

Boron	0.865	0.0985	mg/L	1	B3E1904	05/19/2023	05/22/2023	
-------	-------	--------	------	---	---------	------------	------------	--

DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B3E1832	05/18/2023	05/19/2023	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl	70.5 %	50-150	"	"	"
------------------------	--------	--------	---	---	---

GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg	1	B3E1834	05/18/2023	05/19/2023	U
1,3,5-Trimethylbenzene	ND	0.00200	"	"	"	"	"	U
Benzene	ND	0.00200	"	"	"	"	"	U
Ethylbenzene	ND	0.00200	"	"	"	"	"	U
Toluene	ND	0.00200	"	"	"	"	"	U
Xylenes, total	ND	0.00200	"	"	"	"	"	U
Gasoline Range Hydrocarbons	ND	0.200	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	104 %	70-130	"	"	"
----------------------------------	-------	--------	---	---	---

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini, Project Manager

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS07@2'

5/18/2023 12:00:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc. Y305496-07 (Soil)

GBTEX+TMBs by 8260D

Surrogate: Toluene-d8	94.5 %	70-130	B3E18 34	05/18/2023	05/19/2023
Surrogate: 4-Bromofluorobenzene	92.4 %	70-130	"	"	"

Metals by Saturated Paste by EPA 6010

Calcium	2.90	0.499	meq/L	10	[CALC]	05/20/2023	05/22/2023
Magnesium	2.03	0.823	"	"	"	"	"
Sodium	1.80	0.435	"	"	"	"	"

PAH by 8270D SIM

1-Methylnaphthalene	ND	0.00109	0.00201	mg/Kg	1	L683640	05/23/2023	05/24/2023
2-Methylnaphthalene	ND	0.00194	0.00201	"	"	"	"	"
Acenaphthene	ND	0.000304	0.00067	"	"	"	"	"
Anthracene	ND	0.000334	0.00067	"	"	"	"	"
Benzo(a)anthracene	ND	0.000493	0.00067	"	"	"	"	"
Benzo(a)pyrene	ND	0.000468	0.00067	"	"	"	"	"
Benzo(b)fluoranthene	ND	0.000585	0.00067	"	"	"	"	"
Benzo(k)fluoranthene	ND	0.000437	0.00067	"	"	"	"	"
Chrysene	ND	0.000624	0.00067	"	"	"	"	"
Dibenz(a,h)anthracene	ND	0.000614	0.00067	"	"	"	"	"
Fluoranthene	0.000395	0.000394	0.00067	"	"	"	"	"

J

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS07@2'

5/18/2023 12:00:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Waypoint Analytical, LLC. Y305496-07 (Soil)

PAH by 8270D SIM

Fluorene	ND	0.000286	0.00067	mg/Kg	1	L683640	05/23/2023	05/24/2023
Indeno(1,2,3-cd)pyrene	ND	0.000627	0.00067	"	"	"	"	"
Naphthalene	ND	0.00145	0.00201	"	"	"	"	"
Pyrene	ND	0.000643	0.00067	"	"	"	"	"

Surrogate: 2-Fluorobiphenyl	47.3 %	33-115	"	"	"
Surrogate: 4-Terphenyl-d14	61.7 %	33-122	"	"	"
Surrogate: Nitrobenzene-d5	47 %	29-110	"	"	"

SAR by 20B Saturated Paste

SAR	1.14	SAR	1	B3E2006	05/20/2023	05/22/2023
-----	------	-----	---	---------	------------	------------

Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.678	0.00500	mmhos/cm	1	B3E2007	05/20/2023	05/21/2023
---------------------------	-------	---------	----------	---	---------	------------	------------

Table 915 metals by EPA 6020B

Arsenic	6.59	0.0924	mg/kg	10	B3E1831	05/18/2023	05/19/2023
Barium	143	9.24	"	"	"	"	"
Cadmium	0.230	0.0924	"	"	"	"	"
Selenium	0.429	0.0924	"	"	"	"	05/20/2023

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS07@4'

5/18/2023 12:05:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-08 (Soil)

Boron (DTPA Sorbitol)

Boron	0.787	0.0997	mg/L	1	B3E1904	05/19/2023	05/22/2023	
-------	-------	--------	------	---	---------	------------	------------	--

DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B3E1832	05/18/2023	05/19/2023	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl	66.8 %	50-150	"	"	"	"	"
------------------------	--------	--------	---	---	---	---	---

GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg	1	B3E1834	05/18/2023	05/19/2023	U
1,3,5-Trimethylbenzene	ND	0.00200	"	"	"	"	"	U
Benzene	ND	0.00200	"	"	"	"	"	U
Ethylbenzene	ND	0.00200	"	"	"	"	"	U
Toluene	ND	0.00200	"	"	"	"	"	U
Xylenes, total	ND	0.00200	"	"	"	"	"	U
Gasoline Range Hydrocarbons	ND	0.200	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	103 %	70-130	"	"	"	"	"
----------------------------------	-------	--------	---	---	---	---	---

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini, Project Manager

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS07@4'

5/18/2023 12:05:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-08 (Soil)

GBTEX+TMBs by 8260D

Surrogate: Toluene-d8	90.6 %	70-130	B3E18 34	05/18/2023	05/19/2023
Surrogate: 4-Bromofluorobenzene	96.1 %	70-130	"	"	"

Metals by Saturated Paste by EPA 6010

Calcium	5.10	0.499	meq/L	10	[CALC]	05/20/2023	05/22/2023
Magnesium	2.86	0.823	"	"	"	"	"
Sodium	2.53	0.435	"	"	"	"	"

PAH by 8270D SIM

1-Methylnaphthalene	ND	0.00109	0.00201	mg/Kg	1	L683640	05/23/2023	05/24/2023	
2-Methylnaphthalene	ND	0.00194	0.00201	"	"	"	"	"	
Acenaphthene	ND	0.000304	0.00067	"	"	"	"	"	
Anthracene	ND	0.000334	0.00067	"	"	"	"	"	
Benzo(a)anthracene	ND	0.000493	0.00067	"	"	"	"	"	
Benzo(a)pyrene	ND	0.000468	0.00067	"	"	"	"	"	
Benzo(b)fluoranthene	0.000616	0.000585	0.00067	"	"	"	"	"	J
Benzo(k)fluoranthene	ND	0.000437	0.00067	"	"	"	"	"	
Chrysene	0.000794	0.000624	0.00067	"	"	"	"	"	
Dibenz(a,h)anthracene	ND	0.000614	0.00067	"	"	"	"	"	
Fluoranthene	0.000432	0.000394	0.00067	"	"	"	"	"	J
Fluorene	ND	0.000286	0.00067	"	"	"	"	"	

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS07@4'

5/18/2023 12:05:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Waypoint Analytical, LLC.
Y305496-08 (Soil)

PAH by 8270D SIM

Indeno(1,2,3-cd)pyrene	0.000938	0.000627	0.00067	mg/Kg	1	L683640	05/23/2023	05/24/2023
Naphthalene	ND	0.00145	0.00201	"	"	"	"	"
Pyrene	ND	0.000643	0.00067	"	"	"	"	"

Surrogate: 2-Fluorobiphenyl	53.2 %	33-115	"	"	"
Surrogate: 4-Terphenyl-d14	61.5 %	33-122	"	"	"
Surrogate: Nitrobenzene-d5	60 %	29-110	"	"	"

SAR by 20B Saturated Paste

SAR	1.27	SAR	1	B3E2006	05/20/2023	05/22/2023
-----	------	-----	---	---------	------------	------------

Specific Conductance Mod. 9050A

Specific Conductance (EC)	1.15	0.00500	mmhos/cm	1	B3E2007	05/20/2023	05/21/2023
---------------------------	------	---------	----------	---	---------	------------	------------

Table 915 metals by EPA 6020B

Arsenic	6.41	0.0931	mg/kg	10	B3E1831	05/18/2023	05/19/2023
Barium	134	9.31	"	"	"	"	"
Cadmium	0.237	0.0931	"	"	"	"	"
Selenium	0.426	0.0931	"	"	"	"	05/20/2023

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS07@6'

5/18/2023 12:10:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-09 (Soil)

Boron (DTPA Sorbitol)

Boron	0.241	0.0996	mg/L	1	B3E1904	05/19/2023	05/22/2023	
-------	-------	--------	------	---	---------	------------	------------	--

DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B3E1832	05/18/2023	05/19/2023	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl	67.2 %	50-150	"	"	"
------------------------	--------	--------	---	---	---

GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg	1	B3E1834	05/18/2023	05/19/2023	U
1,3,5-Trimethylbenzene	ND	0.00200	"	"	"	"	"	U
Benzene	ND	0.00200	"	"	"	"	"	U
Ethylbenzene	ND	0.00200	"	"	"	"	"	U
Toluene	ND	0.00200	"	"	"	"	"	U
Xylenes, total	ND	0.00200	"	"	"	"	"	U
Gasoline Range Hydrocarbons	ND	0.200	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	102 %	70-130	"	"	"
----------------------------------	-------	--------	---	---	---

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini, Project Manager

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS07@6'

5/18/2023 12:10:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-09 (Soil)

GBTEX+TMBs by 8260D

Surrogate: Toluene-d8	100 %		70-130			B3E18 34	05/18/2023	05/19/2023
Surrogate: 4-Bromofluorobenzene	90.3 %		70-130			"	"	"

Metals by Saturated Paste by EPA 6010

Calcium	4.16		0.499	meq/L	10	[CALC]	05/20/2023	05/22/2023
Magnesium	2.17		0.823	"	"	"	"	"
Sodium	2.14		0.435	"	"	"	"	"

PAH by 8270D SIM

1-Methylnaphthalene	ND	0.00109	0.00201	mg/Kg	1	L683640	05/23/2023	05/24/2023
2-Methylnaphthalene	ND	0.00194	0.00201	"	"	"	"	"
Acenaphthene	0.00137	0.000304	0.00067	"	"	"	"	"
Anthracene	0.00348	0.000334	0.00067	"	"	"	"	"
Benzo(a)anthracene	0.00277	0.000493	0.00067	"	"	"	"	"
Benzo(a)pyrene	0.00215	0.000468	0.00067	"	"	"	"	"
Benzo(b)fluoranthene	0.00188	0.000585	0.00067	"	"	"	"	"
Benzo(k)fluoranthene	0.0013	0.000437	0.00067	"	"	"	"	"
Chrysene	0.00313	0.000624	0.00067	"	"	"	"	"
Dibenz(a,h)anthracene	ND	0.000614	0.00067	"	"	"	"	"
Fluoranthene	0.0125	0.000394	0.00067	"	"	"	"	"
Fluorene	0.00102	0.000286	0.00067	"	"	"	"	"

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS07@6'

5/18/2023 12:10:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Waypoint Analytical, LLC.
Y305496-09 (Soil)

PAH by 8270D SIM

Indeno(1,2,3-cd)pyrene	0.000894	0.000627	0.00067	mg/Kg	1	L683640	05/23/2023	05/24/2023
Naphthalene	ND	0.00145	0.00201	"	"	"	"	"
Pyrene	0.00924	0.000643	0.00067	"	"	"	"	"

Surrogate: 2-Fluorobiphenyl	44.7 %	33-115	"	"	"
Surrogate: 4-Terphenyl-d14	58 %	33-122	"	"	"
Surrogate: Nitrobenzene-d5	46.2 %	29-110	"	"	"

SAR by 20B Saturated Paste

SAR	1.21	SAR	1	B3E2006	05/20/2023	05/22/2023
-----	------	-----	---	---------	------------	------------

Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.901	0.00500	mmhos/cm	1	B3E2007	05/20/2023	05/21/2023
---------------------------	-------	---------	----------	---	---------	------------	------------

Table 915 metals by EPA 6020B

Arsenic	6.82	0.0915	mg/kg	10	B3E1831	05/18/2023	05/19/2023
Barium	270	9.15	"	"	"	"	"
Cadmium	0.139	0.0915	"	"	"	"	"
Selenium	0.241	0.0915	"	"	"	"	05/20/2023

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS08@2'

5/18/2023 12:15:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-10 (Soil)

Boron (DTPA Sorbitol)

Boron	0.798	0.100	mg/L	1	B3E1904	05/19/2023	05/22/2023	
-------	-------	-------	------	---	---------	------------	------------	--

DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B3E1832	05/18/2023	05/19/2023	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl	70.4 %	50-150	"	"	"
------------------------	--------	--------	---	---	---

GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg	1	B3E1834	05/18/2023	05/19/2023	U
1,3,5-Trimethylbenzene	ND	0.00200	"	"	"	"	"	U
Benzene	ND	0.00200	"	"	"	"	"	U
Ethylbenzene	ND	0.00200	"	"	"	"	"	U
Toluene	ND	0.00200	"	"	"	"	"	U
Xylenes, total	ND	0.00200	"	"	"	"	"	U
Gasoline Range Hydrocarbons	ND	0.200	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	98.7 %	70-130	"	"	"
----------------------------------	--------	--------	---	---	---

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini, Project Manager

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS08@2'

5/18/2023 12:15:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-10 (Soil)

GBTEX+TMBs by 8260D

Surrogate: Toluene-d8	98.2 %	70-130	B3E18 34	05/18/2023	05/19/2023
Surrogate: 4-Bromofluorobenzene	93.2 %	70-130	"	"	"

Metals by Saturated Paste by EPA 6010

Calcium	2.89	0.499	meq/L	10	[CALC]	05/20/2023	05/22/2023
Magnesium	1.90	0.823	"	"	"	"	"
Sodium	1.37	0.435	"	"	"	"	"

PAH by 8270D SIM

1-Methylnaphthalene	ND	0.00109	0.00201	mg/Kg	1	L683640	05/23/2023	05/24/2023
2-Methylnaphthalene	ND	0.00194	0.00201	"	"	"	"	"
Acenaphthene	ND	0.000304	0.00067	"	"	"	"	"
Anthracene	ND	0.000334	0.00067	"	"	"	"	"
Benzo(a)anthracene	ND	0.000493	0.00067	"	"	"	"	"
Benzo(a)pyrene	ND	0.000468	0.00067	"	"	"	"	"
Benzo(b)fluoranthene	ND	0.000585	0.00067	"	"	"	"	"
Benzo(k)fluoranthene	ND	0.000437	0.00067	"	"	"	"	"
Chrysene	ND	0.000624	0.00067	"	"	"	"	"
Dibenz(a,h)anthracene	ND	0.000614	0.00067	"	"	"	"	"
Fluoranthene	ND	0.000394	0.00067	"	"	"	"	"

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS08@2'

5/18/2023 12:15:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Waypoint Analytical, LLC.
Y305496-10 (Soil)

PAH by 8270D SIM

Fluorene	ND	0.000286	0.00067	mg/Kg	1	L683640	05/23/2023	05/24/2023
Indeno(1,2,3-cd)pyrene	ND	0.000627	0.00067	"	"	"	"	"
Naphthalene	ND	0.00145	0.00201	"	"	"	"	"
Pyrene	ND	0.000643	0.00067	"	"	"	"	"

Surrogate: 2-Fluorobiphenyl	55.3 %	33-115	"	"	"
Surrogate: 4-Terphenyl-d14	65.8 %	33-122	"	"	"
Surrogate: Nitrobenzene-d5	64 %	29-110	"	"	"

SAR by 20B Saturated Paste

SAR	0.884	SAR	1	B3E2006	05/20/2023	05/22/2023
-----	-------	-----	---	---------	------------	------------

Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.599	0.00500	mmhos/cm	1	B3E2007	05/20/2023	05/21/2023
---------------------------	-------	---------	----------	---	---------	------------	------------

Table 915 metals by EPA 6020B

Arsenic	6.26	0.0947	mg/kg	10	B3E1831	05/18/2023	05/19/2023
Barium	145	9.47	"	"	"	"	"
Cadmium	0.236	0.0947	"	"	"	"	"
Selenium	0.385	0.0947	"	"	"	"	05/20/2023

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini, Project Manager

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS08@4'

5/18/2023 12:20:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-11 (Soil)

Boron (DTPA Sorbitol)

Boron	0.393	0.0990	mg/L	1	B3E1904	05/19/2023	05/22/2023	
-------	-------	--------	------	---	---------	------------	------------	--

DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B3E1832	05/18/2023	05/19/2023	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl	67.5 %	50-150			"	"	"	
------------------------	--------	--------	--	--	---	---	---	--

GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg	1	B3E1834	05/18/2023	05/19/2023	U
1,3,5-Trimethylbenzene	ND	0.00200	"	"	"	"	"	U
Benzene	ND	0.00200	"	"	"	"	"	U
Ethylbenzene	ND	0.00200	"	"	"	"	"	U
Toluene	ND	0.00200	"	"	"	"	"	U
Xylenes, total	ND	0.00200	"	"	"	"	"	U
Gasoline Range Hydrocarbons	ND	0.200	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	99.6 %	70-130			"	"	"	
----------------------------------	--------	--------	--	--	---	---	---	--

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini, Project Manager

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS08@4'

5/18/2023 12:20:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-11 (Soil)

GBTEX+TMBs by 8260D

Surrogate: Toluene-d8	97.8 %	70-130	B3E18 34	05/18/2023	05/19/2023
Surrogate: 4-Bromofluorobenzene	89.6 %	70-130	"	"	"

Metals by Saturated Paste by EPA 6010

Calcium	2.87	0.499	meq/L	10	[CALC]	05/20/2023	05/22/2023
Magnesium	1.39	0.823	"	"	"	"	"
Sodium	0.997	0.435	"	"	"	"	"

PAH by 8270D SIM

1-Methylnaphthalene	ND	0.00109	0.00201	mg/Kg	1	L683640	05/23/2023	05/24/2023
2-Methylnaphthalene	ND	0.00194	0.00201	"	"	"	"	"
Acenaphthene	ND	0.000304	0.00067	"	"	"	"	"
Anthracene	ND	0.000334	0.00067	"	"	"	"	"
Benzo(a)anthracene	ND	0.000493	0.00067	"	"	"	"	"
Benzo(a)pyrene	ND	0.000468	0.00067	"	"	"	"	"
Benzo(b)fluoranthene	0.000625	0.000585	0.00067	"	"	"	"	" J
Benzo(k)fluoranthene	ND	0.000437	0.00067	"	"	"	"	"
Chrysene	ND	0.000624	0.00067	"	"	"	"	"
Dibenz(a,h)anthracene	ND	0.000614	0.00067	"	"	"	"	"
Fluoranthene	ND	0.000394	0.00067	"	"	"	"	"

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS08@4'

5/18/2023 12:20:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Waypoint Analytical, LLC.
Y305496-11 (Soil)

PAH by 8270D SIM

Fluorene	ND	0.000286	0.00067	mg/Kg	1	L683640	05/23/2023	05/24/2023
Indeno(1,2,3-cd)pyrene	ND	0.000627	0.00067	"	"	"	"	"
Naphthalene	ND	0.00145	0.00201	"	"	"	"	"
Pyrene	ND	0.000643	0.00067	"	"	"	"	"

Surrogate: 2-Fluorobiphenyl	64.3 %	33-115	"	"	"
Surrogate: 4-Terphenyl-d14	82 %	33-122	"	"	"
Surrogate: Nitrobenzene-d5	70.6 %	29-110	"	"	"

SAR by 20B Saturated Paste

SAR	0.683	SAR	1	B3E2006	05/20/2023	05/22/2023
-----	-------	-----	---	---------	------------	------------

Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.536	0.00500	mmhos/cm	1	B3E2007	05/20/2023	05/21/2023
---------------------------	-------	---------	----------	---	---------	------------	------------

Table 915 metals by EPA 6020B

Arsenic	5.85	0.0921	mg/kg	10	B3E1831	05/18/2023	05/19/2023
Barium	111	9.21	"	"	"	"	"
Cadmium	0.130	0.0921	"	"	"	"	"
Selenium	0.399	0.0921	"	"	"	"	05/20/2023

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS08@6'

5/18/2023 12:25:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-12 (Soil)

Boron (DTPA Sorbitol)

Boron	0.284	0.0996	mg/L	1	B3E1904	05/19/2023	05/22/2023	
-------	-------	--------	------	---	---------	------------	------------	--

DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B3E1832	05/18/2023	05/19/2023	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl	65.4 %	50-150	"	"	"
------------------------	--------	--------	---	---	---

GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg	1	B3E1834	05/18/2023	05/19/2023	U
1,3,5-Trimethylbenzene	ND	0.00200	"	"	"	"	"	U
Benzene	ND	0.00200	"	"	"	"	"	U
Ethylbenzene	ND	0.00200	"	"	"	"	"	U
Toluene	ND	0.00200	"	"	"	"	"	U
Xylenes, total	ND	0.00200	"	"	"	"	"	U
Gasoline Range Hydrocarbons	ND	0.200	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	100 %	70-130	"	"	"
----------------------------------	-------	--------	---	---	---

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini, Project Manager

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS08@6'

5/18/2023 12:25:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-12 (Soil)

GBTEX+TMBs by 8260D

Surrogate: Toluene-d8	99.9 %	70-130	B3E18 34	05/18/2023	05/19/2023
Surrogate: 4-Bromofluorobenzene	89.0 %	70-130	"	"	"

Metals by Saturated Paste by EPA 6010

Calcium	2.25	0.499	meq/L	10	[CALC]	05/20/2023	05/22/2023
Magnesium	1.06	0.823	"	"	"	"	"
Sodium	0.998	0.435	"	"	"	"	"

PAH by 8270D SIM

1-Methylnaphthalene	ND	0.00109	0.00201	mg/Kg	1	L683640	05/23/2023	05/24/2023
2-Methylnaphthalene	ND	0.00194	0.00201	"	"	"	"	"
Acenaphthene	ND	0.000304	0.00067	"	"	"	"	"
Anthracene	ND	0.000334	0.00067	"	"	"	"	"
Benzo(a)anthracene	ND	0.000493	0.00067	"	"	"	"	"
Benzo(a)pyrene	ND	0.000468	0.00067	"	"	"	"	"
Benzo(b)fluoranthene	ND	0.000585	0.00067	"	"	"	"	"
Benzo(k)fluoranthene	0.000724	0.000437	0.00067	"	"	"	"	"
Chrysene	ND	0.000624	0.00067	"	"	"	"	"
Dibenz(a,h)anthracene	ND	0.000614	0.00067	"	"	"	"	"
Fluoranthene	ND	0.000394	0.00067	"	"	"	"	"

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS08@6'

5/18/2023 12:25:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Waypoint Analytical, LLC.
Y305496-12 (Soil)

PAH by 8270D SIM

Fluorene	ND	0.000286	0.00067	mg/Kg	1	L683640	05/23/2023	05/24/2023
Indeno(1,2,3-cd)pyrene	ND	0.000627	0.00067	"	"	"	"	"
Naphthalene	ND	0.00145	0.00201	"	"	"	"	"
Pyrene	ND	0.000643	0.00067	"	"	"	"	"

Surrogate: 2-Fluorobiphenyl	56.2 %	33-115	"	"	"
Surrogate: 4-Terphenyl-d14	78.4 %	33-122	"	"	"
Surrogate: Nitrobenzene-d5	58.1 %	29-110	"	"	"

SAR by 20B Saturated Paste

SAR	0.776	SAR	1	B3E2006	05/20/2023	05/22/2023
-----	-------	-----	---	---------	------------	------------

Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.475	0.00500	mmhos/cm	1	B3E2007	05/20/2023	05/21/2023
---------------------------	-------	---------	----------	---	---------	------------	------------

Table 915 metals by EPA 6020B

Arsenic	5.97	0.0966	mg/kg	10	B3E1831	05/18/2023	05/19/2023
Barium	187	9.66	"	"	"	"	"
Cadmium	0.139	0.0966	"	"	"	"	"
Selenium	0.249	0.0966	"	"	"	"	05/20/2023

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS09@2'

5/18/2023 12:30:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-13 (Soil)

Boron (DTPA Sorbitol)

Boron	0.512	0.0996	mg/L	1	B3E1904	05/19/2023	05/22/2023	
-------	-------	--------	------	---	---------	------------	------------	--

DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B3E1832	05/18/2023	05/19/2023	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl	66.6 %	50-150	"	"	"	"	"	
------------------------	--------	--------	---	---	---	---	---	--

GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg	1	B3E1834	05/18/2023	05/19/2023	U
1,3,5-Trimethylbenzene	ND	0.00200	"	"	"	"	"	U
Benzene	ND	0.00200	"	"	"	"	"	U
Ethylbenzene	ND	0.00200	"	"	"	"	"	U
Toluene	ND	0.00200	"	"	"	"	"	U
Xylenes, total	ND	0.00200	"	"	"	"	"	U
Gasoline Range Hydrocarbons	ND	0.200	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	99.0 %	70-130	"	"	"	"	"	
----------------------------------	--------	--------	---	---	---	---	---	--

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini, Project Manager

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS09@2'

5/18/2023 12:30:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-13 (Soil)

GBTEX+TMBs by 8260D

Surrogate: Toluene-d8	98.9 %	70-130	B3E18 34	05/18/2023	05/19/2023
Surrogate: 4-Bromofluorobenzene	90.6 %	70-130	"	"	"

Metals by Saturated Paste by EPA 6010

Calcium	2.58	0.499	meq/L	10	[CALC]	05/20/2023	05/22/2023
Magnesium	1.75	0.823	"	"	"	"	"
Sodium	1.59	0.435	"	"	"	"	"

PAH by 8270D-SIM

1-Methylnaphthalene	ND	0.00109	0.00201	mg/Kg	1	L683761	05/24/2023	05/24/2023
2-Methylnaphthalene	ND	0.00194	0.00201	"	"	"	"	"
Acenaphthene	ND	0.000304	0.00067	"	"	"	"	"
Anthracene	ND	0.000334	0.00067	"	"	"	"	"
Benzo(a)anthracene	ND	0.000493	0.00067	"	"	"	"	"
Benzo(a)pyrene	ND	0.000468	0.00067	"	"	"	"	"
Benzo(b)fluoranthene	ND	0.000585	0.00067	"	"	"	"	"
Benzo(k)fluoranthene	ND	0.000437	0.00067	"	"	"	"	"
Chrysene	ND	0.000624	0.00067	"	"	"	"	"
Dibenz(a,h)anthracene	ND	0.000614	0.00067	"	"	"	"	"
Fluoranthene	ND	0.000394	0.00067	"	"	"	"	"

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS09@2'

5/18/2023 12:30:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Waypoint Analytical, LLC.
Y305496-13 (Soil)

PAH by 8270D-SIM

Fluorene	ND	0.000286	0.00067	mg/Kg	1	L683761	05/24/2023	05/24/2023
Indeno(1,2,3-cd)pyrene	ND	0.000627	0.00067	"	"	"	"	"
Naphthalene	ND	0.00145	0.00201	"	"	"	"	"
Pyrene	ND	0.000643	0.00067	"	"	"	"	"

Surrogate: 2-Fluorobiphenyl	51.4 %	33-115	"	"	"
Surrogate: 4-Terphenyl-d14	66.8 %	33-122	"	"	"
Surrogate: Nitrobenzene-d5	55.7 %	29-110	"	"	"

SAR by 20B Saturated Paste

SAR	1.08	SAR	1	B3E2006	05/20/2023	05/22/2023
-----	------	-----	---	---------	------------	------------

Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.539	0.00500	mmhos/cm	1	B3E2007	05/20/2023	05/21/2023
---------------------------	-------	---------	----------	---	---------	------------	------------

Table 915 metals by EPA 6020B

Arsenic	6.39	0.0919	mg/kg	10	B3E1831	05/18/2023	05/19/2023
Barium	154	9.19	"	"	"	"	"
Cadmium	0.236	0.0919	"	"	"	"	"
Selenium	0.359	0.0919	"	"	"	"	05/22/2023

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS09@4'

5/18/2023 12:35:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-14 (Soil)

Boron (DTPA Sorbitol)

Boron	0.690	0.0995	mg/L	1	B3E1904	05/19/2023	05/22/2023	
-------	-------	--------	------	---	---------	------------	------------	--

DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B3E1832	05/18/2023	05/19/2023	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl	67.1 %	50-150			"	"	"	
------------------------	--------	--------	--	--	---	---	---	--

GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg	1	B3E1834	05/18/2023	05/19/2023	U
1,3,5-Trimethylbenzene	ND	0.00200	"	"	"	"	"	U
Benzene	ND	0.00200	"	"	"	"	"	U
Ethylbenzene	ND	0.00200	"	"	"	"	"	U
Toluene	ND	0.00200	"	"	"	"	"	U
Xylenes, total	ND	0.00200	"	"	"	"	"	U
Gasoline Range Hydrocarbons	ND	0.200	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	102 %	70-130			"	"	"	
----------------------------------	-------	--------	--	--	---	---	---	--

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini, Project Manager

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS09@4'

5/18/2023 12:35:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-14 (Soil)

GBTEX+TMBs by 8260D

Surrogate: Toluene-d8	95.3 %	70-130	B3E18 34	05/18/2023	05/19/2023
Surrogate: 4-Bromofluorobenzene	90.8 %	70-130	"	"	"

Metals by Saturated Paste by EPA 6010

Calcium	2.59	0.499	meq/L	10	[CALC]	05/20/2023	05/22/2023
Magnesium	1.63	0.823	"	"	"	"	"
Sodium	1.84	0.435	"	"	"	"	"

PAH by 8270D-SIM

1-Methylnaphthalene	ND	0.00109	0.00201	mg/Kg	1	L683761	05/24/2023	05/24/2023
2-Methylnaphthalene	ND	0.00194	0.00201	"	"	"	"	"
Acenaphthene	ND	0.000304	0.00067	"	"	"	"	"
Anthracene	ND	0.000334	0.00067	"	"	"	"	"
Benzo(a)anthracene	0.000564	0.000493	0.00067	"	"	"	"	J
Benzo(a)pyrene	0.00066	0.000468	0.00067	"	"	"	"	J
Benzo(b)fluoranthene	ND	0.000585	0.00067	"	"	"	"	"
Benzo(k)fluoranthene	ND	0.000437	0.00067	"	"	"	"	"
Chrysene	0.000702	0.000624	0.00067	"	"	"	"	"
Dibenz(a,h)anthracene	ND	0.000614	0.00067	"	"	"	"	"
Fluoranthene	0.000718	0.000394	0.00067	"	"	"	"	"
Fluorene	ND	0.000286	0.00067	"	"	"	"	"

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS09@4'

5/18/2023 12:35:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Waypoint Analytical, LLC.
Y305496-14 (Soil)

PAH by 8270D-SIM

Indeno(1,2,3-cd)pyrene	ND	0.000627	0.00067	mg/Kg	1	L683761	05/24/2023	05/24/2023
Naphthalene	ND	0.00145	0.00201	"	"	"	"	"
Pyrene	0.00134	0.000643	0.00067	"	"	"	"	"

Surrogate: 2-Fluorobiphenyl	55.6 %	33-115	"	"	"
Surrogate: 4-Terphenyl-d14	65.2 %	33-122	"	"	"
Surrogate: Nitrobenzene-d5	50.2 %	29-110	"	"	"

SAR by 20B Saturated Paste

SAR	1.27	SAR	1	B3E2006	05/20/2023	05/22/2023
-----	------	-----	---	---------	------------	------------

Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.537	0.00500	mmhos/cm	1	B3E2007	05/20/2023	05/21/2023
---------------------------	-------	---------	----------	---	---------	------------	------------

Table 915 metals by EPA 6020B

Arsenic	6.65	0.0916	mg/kg	10	B3E1831	05/18/2023	05/19/2023
Barium	145	9.16	"	"	"	"	"
Cadmium	0.214	0.0916	"	"	"	"	"
Selenium	0.336	0.0916	"	"	"	"	05/22/2023

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS09@6'

5/18/2023 12:40:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-15 (Soil)

Boron (DTPA Sorbitol)

Boron	0.152	0.0996	mg/L	1	B3E1904	05/19/2023	05/22/2023	
-------	-------	--------	------	---	---------	------------	------------	--

DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B3E1832	05/18/2023	05/19/2023	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl	69.5 %	50-150	"	"	"	"	"
------------------------	--------	--------	---	---	---	---	---

GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg	1	B3E1834	05/18/2023	05/19/2023	U
1,3,5-Trimethylbenzene	ND	0.00200	"	"	"	"	"	U
Benzene	ND	0.00200	"	"	"	"	"	U
Ethylbenzene	ND	0.00200	"	"	"	"	"	U
Toluene	ND	0.00200	"	"	"	"	"	U
Xylenes, total	ND	0.00200	"	"	"	"	"	U
Gasoline Range Hydrocarbons	ND	0.200	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	99.0 %	70-130	"	"	"	"	"
----------------------------------	--------	--------	---	---	---	---	---

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini, Project Manager

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS09@6'

5/18/2023 12:40:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-15 (Soil)

GBTEX+TMBs by 8260D

Surrogate: Toluene-d8	94.8 %	70-130	B3E18 34	05/18/2023	05/19/2023
Surrogate: 4-Bromofluorobenzene	93.3 %	70-130	"	"	"

Metals by Saturated Paste by EPA 6010

Calcium	1.13	0.499	meq/L	10	[CALC]	05/20/2023	05/22/2023
Magnesium	ND	0.823	"	"	"	"	"
Sodium	0.846	0.435	"	"	"	"	"

PAH by 8270D-SIM

1-Methylnaphthalene	ND	0.00109	0.00201	mg/Kg	1	L683761	05/24/2023	05/24/2023
2-Methylnaphthalene	ND	0.00194	0.00201	"	"	"	"	"
Acenaphthene	ND	0.000304	0.00067	"	"	"	"	"
Anthracene	ND	0.000334	0.00067	"	"	"	"	"
Benzo(a)anthracene	ND	0.000493	0.00067	"	"	"	"	"
Benzo(a)pyrene	ND	0.000468	0.00067	"	"	"	"	"
Benzo(b)fluoranthene	ND	0.000585	0.00067	"	"	"	"	"
Benzo(k)fluoranthene	ND	0.000437	0.00067	"	"	"	"	"
Chrysene	ND	0.000624	0.00067	"	"	"	"	"
Dibenz(a,h)anthracene	ND	0.000614	0.00067	"	"	"	"	"
Fluoranthene	ND	0.000394	0.00067	"	"	"	"	"

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS09@6'

5/18/2023 12:40:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Waypoint Analytical, LLC.
Y305496-15 (Soil)

PAH by 8270D-SIM

Fluorene	ND	0.000286	0.00067	mg/Kg	1	L683761	05/24/2023	05/24/2023
Indeno(1,2,3-cd)pyrene	ND	0.000627	0.00067	"	"	"	"	"
Naphthalene	ND	0.00145	0.00201	"	"	"	"	"
Pyrene	ND	0.000643	0.00067	"	"	"	"	"

Surrogate: 2-Fluorobiphenyl	49.1 %	33-115	"	"	"
Surrogate: 4-Terphenyl-d14	63.3 %	33-122	"	"	"
Surrogate: Nitrobenzene-d5	40.9 %	29-110	"	"	"

SAR by 20B Saturated Paste

SAR	0.917	SAR	1	B3E2006	05/20/2023	05/22/2023
-----	-------	-----	---	---------	------------	------------

Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.269	0.00500	mmhos/cm	1	B3E2007	05/20/2023	05/21/2023
---------------------------	-------	---------	----------	---	---------	------------	------------

Table 915 metals by EPA 6020B

Arsenic	1.90	0.0871	mg/kg	10	B3E1831	05/18/2023	05/19/2023
Barium	39.6	8.71	"	"	"	"	"
Cadmium	ND	0.0871	"	"	"	"	" U
Selenium	ND	0.0871	"	"	"	"	05/22/2023 U

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Native - BG01@0.25'
5/18/2023 12:45:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-16 (Soil)

Boron (DTPA Sorbitol)

Boron	0.388	0.100	mg/L	1	B3E1904	05/19/2023	05/22/2023
-------	-------	-------	------	---	---------	------------	------------

Metals by Saturated Paste by EPA 6010

Calcium	2.70	0.499	meq/L	10	[CALC]	05/20/2023	05/22/2023
Magnesium	1.11	0.823	"	"	"	"	"
Sodium	0.829	0.435	"	"	"	"	"

pH in Soil by 9045D

pH	8.25		pH Units	1	B3E2007	05/20/2023	05/21/2023
----	------	--	----------	---	---------	------------	------------

SAR by 20B Saturated Paste

SAR	0.601		SAR	1	B3E2006	05/20/2023	05/22/2023
-----	-------	--	-----	---	---------	------------	------------

Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.567	0.00500	mmhos/cm	1	B3E2007	05/20/2023	05/21/2023
---------------------------	-------	---------	----------	---	---------	------------	------------

Table 915 metals by EPA 6020B

Arsenic	4.94	0.0881	mg/kg	10	B3E1831	05/18/2023	05/19/2023
Barium	65.6	8.81	"	"	"	"	"
Cadmium	0.153	0.0881	"	"	"	"	"
Copper	ND	8.81	"	"	"	"	" U

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Native - BG01@0.25'
5/18/2023 12:45:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-16 (Soil)

Table 915 metals by EPA 6020B

Lead	ND		8.81	mg/kg	10	B3E1831	05/18/2023	05/19/2023	U
Nickel	ND		8.81	"	"	"	"	"	U
Selenium	0.196		0.0881	"	"	"	"	05/22/2023	
Silver	ND		0.0881	"	"	"	"	05/19/2023	U
Zinc	ND		88.1	"	"	"	"	"	U

Total Metals by 7196A

Chromium, Hexavalent	ND	0.244	0.5	mg/Kg	1	L683918	05/18/2023	05/24/2023	
----------------------	----	-------	-----	-------	---	---------	------------	------------	--

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Native - BG01@3'

5/18/2023 12:50:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc. Y305496-17 (Soil)

Boron (DTPA Sorbitol)

Boron	ND	0.0999	mg/L	1	B3E1904	05/19/2023	05/22/2023	U
-------	----	--------	------	---	---------	------------	------------	---

Metals by Saturated Paste by EPA 6010

Calcium	0.772	0.499	meq/L	10	[CALC]	05/20/2023	05/22/2023
Magnesium	ND	0.823	"	"	"	"	"
Sodium	0.753	0.435	"	"	"	"	"

pH in Soil by 9045D

pH	8.29	pH Units	1	B3E2007	05/20/2023	05/21/2023
----	------	----------	---	---------	------------	------------

SAR by 20B Saturated Paste

SAR	1.01	SAR	1	B3E2006	05/20/2023	05/22/2023
-----	------	-----	---	---------	------------	------------

Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.204	0.00500	mmhos/cm	1	B3E2007	05/20/2023	05/21/2023
---------------------------	-------	---------	----------	---	---------	------------	------------

Table 915 metals by EPA 6020B

Arsenic	4.41	0.0911	mg/kg	10	B3E1831	05/18/2023	05/19/2023
Barium	77.9	9.11	"	"	"	"	"
Cadmium	0.139	0.0911	"	"	"	"	"
Copper	ND	9.11	"	"	"	"	U

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini, Project Manager

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Native - BG01@3'

5/18/2023 12:50:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	------------------------	--------------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-17 (Soil)

Table 915 metals by EPA 6020B

Lead	ND		9.11	mg/kg	10	B3E1831	05/18/2023	05/19/2023	U
Nickel	ND		9.11	"	"	"	"	"	U
Selenium	0.177		0.0911	"	"	"	"	05/22/2023	
Silver	ND		0.0911	"	"	"	"	05/19/2023	U
Zinc	ND		91.1	"	"	"	"	"	U

Total Metals by 7196A

Chromium, Hexavalent	ND	0.246	0.505	mg/Kg	1	L683918	05/18/2023	05/24/2023	
----------------------	----	-------	-------	-------	---	---------	------------	------------	--

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Native - BG02@0.25'
5/18/2023 12:55:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-18 (Soil)

Boron (DTPA Sorbitol)

Boron	0.390	0.100	mg/L	1	B3E1904	05/19/2023	05/22/2023
-------	-------	-------	------	---	---------	------------	------------

Metals by Saturated Paste by EPA 6010

Calcium	1.99	0.499	meq/L	10	[CALC]	05/20/2023	05/22/2023
Magnesium	ND	0.823	"	"	"	"	"
Sodium	0.793	0.435	"	"	"	"	"

pH in Soil by 9045D

pH	8.30	pH Units	1	B3E2007	05/20/2023	05/21/2023
----	------	----------	---	---------	------------	------------

SAR by 20B Saturated Paste

SAR	0.688	SAR	1	B3E2006	05/20/2023	05/22/2023
-----	-------	-----	---	---------	------------	------------

Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.394	0.00500	mmhos/cm	1	B3E2007	05/20/2023	05/21/2023
---------------------------	-------	---------	----------	---	---------	------------	------------

Table 915 metals by EPA 6020B

Arsenic	3.71	0.0882	mg/kg	10	B3E1831	05/18/2023	05/19/2023
Barium	102	8.82	"	"	"	"	"
Cadmium	0.124	0.0882	"	"	"	"	"
Copper	10.4	8.82	"	"	"	"	"

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Native - BG02@0.25'
5/18/2023 12:55:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-18 (Soil)

Table 915 metals by EPA 6020B

Lead	ND	8.82	mg/kg	10	B3E1831	05/18/2023	05/19/2023	U
Nickel	9.45	8.82	"	"	"	"	"	
Selenium	0.224	0.0882	"	"	"	"	05/22/2023	
Silver	ND	0.0882	"	"	"	"	05/19/2023	U
Zinc	ND	88.2	"	"	"	"	"	U

Total Metals by 7196A

Chromium, Hexavalent	ND	0.251	0.516	mg/Kg	1	L683918	05/18/2023	05/24/2023
----------------------	----	-------	-------	-------	---	---------	------------	------------

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Native - BG02@3'

5/18/2023 1:00:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc. Y305496-19 (Soil)

Boron (DTPA Sorbitol)

Boron	0.438	0.0989	mg/L	1	B3E1904	05/19/2023	05/22/2023
-------	-------	--------	------	---	---------	------------	------------

Metals by Saturated Paste by EPA 6010

Calcium	3.01	0.499	meq/L	10	[CALC]	05/20/2023	05/22/2023
Magnesium	1.74	0.823	"	"	"	"	"
Sodium	2.16	0.435	"	"	"	"	"

pH in Soil by 9045D

pH	8.33		pH Units	1	B3E2007	05/20/2023	05/21/2023
----	------	--	----------	---	---------	------------	------------

SAR by 20B Saturated Paste

SAR	1.40		SAR	1	B3E2006	05/20/2023	05/22/2023
-----	------	--	-----	---	---------	------------	------------

Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.670	0.00500	mmhos/cm	1	B3E2007	05/20/2023	05/21/2023
---------------------------	-------	---------	----------	---	---------	------------	------------

Table 915 metals by EPA 6020B

Arsenic	5.96	0.0919	mg/kg	10	B3E1831	05/18/2023	05/19/2023
Barium	169	9.19	"	"	"	"	"
Cadmium	0.195	0.0919	"	"	"	"	"
Copper	11.7	9.19	"	"	"	"	"

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Native - BG02@3'

5/18/2023 1:00:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-19 (Soil)

Table 915 metals by EPA 6020B

Lead	10.6	9.19	mg/kg	10	B3E1831	05/18/2023	05/19/2023	
Nickel	14.1	9.19	"	"	"	"	"	
Selenium	0.272	0.0919	"	"	"	"	05/22/2023	
Silver	ND	0.0919	"	"	"	"	05/19/2023	U
Zinc	ND	91.9	"	"	"	"	"	U

Total Metals by 7196A

Chromium, Hexavalent	ND	0.244	0.5	mg/Kg	1	L683918	05/18/2023	05/24/2023
----------------------	----	-------	-----	-------	---	---------	------------	------------

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini, Project Manager

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Native - BG03@0.25'
5/18/2023 1:05:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-20 (Soil)

Boron (DTPA Sorbitol)

Boron	0.896	0.100	mg/L	1	B3E1905	05/19/2023	05/22/2023
-------	-------	-------	------	---	---------	------------	------------

Metals by Saturated Paste by EPA 6010

Calcium	2.90	0.499	meq/L	10	[CALC]	05/20/2023	05/22/2023
Magnesium	1.90	0.823	"	"	"	"	"
Sodium	1.41	0.435	"	"	"	"	"

pH in Soil by 9045D

pH	8.27		pH Units	1	B3E2007	05/20/2023	05/21/2023
----	------	--	----------	---	---------	------------	------------

SAR by 20B Saturated Paste

SAR	0.913		SAR	1	B3E2006	05/20/2023	05/22/2023
-----	-------	--	-----	---	---------	------------	------------

Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.552	0.00500	mmhos/cm	1	B3E2007	05/20/2023	05/21/2023
---------------------------	-------	---------	----------	---	---------	------------	------------

Table 915 metals by EPA 6020B

Arsenic	6.23	0.0930	mg/kg	10	B3E1831	05/18/2023	05/19/2023
Barium	150	9.30	"	"	"	"	"
Cadmium	0.249	0.0930	"	"	"	"	"
Copper	13.9	9.30	"	"	"	"	"

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Native - BG03@0.25'
5/18/2023 1:05:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-20 (Soil)

Table 915 metals by EPA 6020B

Lead	13.3	9.30	mg/kg	10	B3E1831	05/18/2023	05/19/2023	
Nickel	14.8	9.30	"	"	"	"	"	
Selenium	0.375	0.0930	"	"	"	"	05/22/2023	
Silver	ND	0.0930	"	"	"	"	05/19/2023	U
Zinc	ND	93.0	"	"	"	"	"	U

Total Metals by 7196A

Chromium, Hexavalent	ND	0.245	0.504	mg/Kg	1	L683918	05/18/2023	05/24/2023
----------------------	----	-------	-------	-------	---	---------	------------	------------

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Native - BG03@3'

5/18/2023 1:10:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc. Y305496-21 (Soil)

Boron (DTPA Sorbitol)

Boron	0.628	0.0982	mg/L	1	B3E1905	05/19/2023	05/22/2023
-------	-------	--------	------	---	---------	------------	------------

Metals by Saturated Paste by EPA 6010

Calcium	3.14	0.499	meq/L	10	[CALC]	05/20/2023	05/22/2023
Magnesium	1.74	0.823	"	"	"	"	"
Sodium	1.65	0.435	"	"	"	"	"

pH in Soil by 9045D

pH	8.54		pH Units	1	B3E2005	05/20/2023	05/21/2023
----	------	--	----------	---	---------	------------	------------

SAR by 20B Saturated Paste

SAR	1.06		SAR	1	B3E2004	05/20/2023	05/22/2023
-----	------	--	-----	---	---------	------------	------------

Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.675	0.00500	mmhos/cm	1	B3E2005	05/20/2023	05/21/2023
---------------------------	-------	---------	----------	---	---------	------------	------------

Table 915 metals by EPA 6020B

Arsenic	6.16	0.0864	mg/kg	10	B3E1830	05/18/2023	05/19/2023
Barium	155	8.64	"	"	"	"	"
Cadmium	0.201	0.0864	"	"	"	"	"
Copper	12.2	8.64	"	"	"	"	"

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Native - BG03@3'

5/18/2023 1:10:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-21 (Soil)

Table 915 metals by EPA 6020B

Lead	12.0	8.64	mg/kg	10	B3E1830	05/18/2023	05/19/2023	
Nickel	13.6	8.64	"	"	"	"	"	
Selenium	0.326	0.0864	"	"	"	"	"	
Silver	ND	0.0864	"	"	"	"	"	U
Zinc	ND	86.4	"	"	"	"	"	U

Total Metals by 7196A

Chromium, Hexavalent	ND	0.244	0.5	mg/Kg	1	L683918	05/18/2023	05/24/2023
----------------------	----	-------	-----	-------	---	---------	------------	------------

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini, Project Manager

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Native - BG04@0.25'
5/18/2023 1:15:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-22 (Soil)

Boron (DTPA Sorbitol)

Boron	ND	0.0992	mg/L	1	B3E1905	05/19/2023	05/22/2023	U
-------	----	--------	------	---	---------	------------	------------	---

Metals by Saturated Paste by EPA 6010

Calcium	0.873	0.499	meq/L	10	[CALC]	05/20/2023	05/22/2023
Magnesium	ND	0.823	"	"	"	"	"
Sodium	1.14	0.435	"	"	"	"	"

pH in Soil by 9045D

pH	8.45	pH Units	1	B3E2005	05/20/2023	05/21/2023
----	------	----------	---	---------	------------	------------

SAR by 20B Saturated Paste

SAR	1.40	SAR	1	B3E2004	05/20/2023	05/22/2023
-----	------	-----	---	---------	------------	------------

Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.262	0.00500	mmhos/cm	1	B3E2005	05/20/2023	05/21/2023
---------------------------	-------	---------	----------	---	---------	------------	------------

Table 915 metals by EPA 6020B

Arsenic	2.03	0.0845	mg/kg	10	B3E1830	05/18/2023	05/19/2023
Barium	44.0	8.45	"	"	"	"	"
Cadmium	ND	0.0845	"	"	"	"	U

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Native - BG04@0.25'
5/18/2023 1:15:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-22 (Soil)

Table 915 metals by EPA 6020B

Copper	ND	8.45	mg/kg	10	B3E1830	05/18/2023	05/19/2023	U
Lead	ND	8.45	"	"	"	"	"	U
Nickel	ND	8.45	"	"	"	"	"	U
Selenium	0.0904	0.0845	"	"	"	"	"	
Silver	ND	0.0845	"	"	"	"	"	U
Zinc	ND	84.5	"	"	"	"	"	U

Total Metals by 7196A

Chromium, Hexavalent	ND	0.248	0.51	mg/Kg	1	L683918	05/18/2023	05/24/2023
----------------------	----	-------	------	-------	---	---------	------------	------------

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Native - BG04@3'

5/18/2023 1:20:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc. Y305496-23 (Soil)

Boron (DTPA Sorbitol)

Boron	0.700	0.0981	mg/L	1	B3E1905	05/19/2023	05/22/2023
-------	-------	--------	------	---	---------	------------	------------

Metals by Saturated Paste by EPA 6010

Calcium	2.39	0.499	meq/L	10	[CALC]	05/20/2023	05/22/2023
Magnesium	1.61	0.823	"	"	"	"	"
Sodium	1.72	0.435	"	"	"	"	"

pH in Soil by 9045D

pH	8.33		pH Units	1	B3E2005	05/20/2023	05/21/2023
----	------	--	----------	---	---------	------------	------------

SAR by 20B Saturated Paste

SAR	1.22		SAR	1	B3E2004	05/20/2023	05/22/2023
-----	------	--	-----	---	---------	------------	------------

Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.524	0.00500	mmhos/cm	1	B3E2005	05/20/2023	05/21/2023
---------------------------	-------	---------	----------	---	---------	------------	------------

Table 915 metals by EPA 6020B

Arsenic	5.90	0.0914	mg/kg	10	B3E1830	05/18/2023	05/19/2023
Barium	161	9.14	"	"	"	"	"
Cadmium	0.216	0.0914	"	"	"	"	"
Copper	12.4	9.14	"	"	"	"	"

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Native - BG04@3'

5/18/2023 1:20:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y305496-23 (Soil)

Table 915 metals by EPA 6020B

Lead	12.0		9.14	mg/kg	10	B3E1830	05/18/2023	05/19/2023	
Nickel	13.9		9.14	"	"	"	"	"	
Selenium	0.294		0.0914	"	"	"	"	"	
Silver	ND		0.0914	"	"	"	"	"	U
Zinc	ND		91.4	"	"	"	"	"	U

Total Metals by 7196A

Chromium, Hexavalent	ND	0.252	0.518	mg/Kg	1	L683918	05/18/2023	05/24/2023	
----------------------	----	-------	-------	-------	---	---------	------------	------------	--

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Extractable Petroleum Hydrocarbons by 8015D - Quality Control Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3E1832 - EPA 3550B										
Blank (B3E1832-BLK1)					Prepared: 05/18/2023 Analyzed: 05/18/2023					
Diesel (C10-C28)	ND	25.0	mg/kg							U
Residual Range Organics (C28-C40)	ND	100	"							U
Surrogate: o-Terphenyl	18		"	24.9		71.8	50-150			

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Extractable Petroleum Hydrocarbons by 8015D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3E1832 - EPA 3550B										
LCS (B3E1832-BS1)					Prepared: 05/18/2023 Analyzed: 05/18/2023					
Diesel (C10-C28)	781	50.0	mg/kg	1000		78.1	70-130			
Residual Range Organics (C28-C40)	843	200	"	1000		84.3	70-130			
Surrogate: o-Terphenyl	42		"	49.8		85.3	50-150			

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Extractable Petroleum Hydrocarbons by 8015D - Quality Control Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B3E1832 - EPA 3550B

Matrix Spike (B3E1832-MS1)		Source: Y305496-01			Prepared: 05/18/2023 Analyzed: 05/18/2023					
Diesel (C10-C28)	782	50.0	mg/kg	1000	ND	78.2	70-130			
Residual Range Organics (C28-C40)	834	200	"	1000	ND	83.4	70-130			
Surrogate: o-Terphenyl	35		"	49.8		69.6	50-150			

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Extractable Petroleum Hydrocarbons by 8015D - Quality Control Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B3E1832 - EPA 3550B

Matrix Spike Dup (B3E1832-MSD1)		Source: Y305496-01			Prepared: 05/18/2023 Analyzed: 05/18/2023					
Diesel (C10-C28)	781	50.0	mg/kg	1000	ND	78.1	70-130	0.136	35	
Residual Range Organics (C28-C40)	840	200	"	1000	ND	84.0	70-130	0.634	35	
Surrogate: o-Terphenyl	41		"	49.8		83.2	50-150			

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Extractable Petroleum Hydrocarbons by 8015D - Quality Control

Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3E1834 - EPA 5030 (soil)										
Blank (B3E1834-BLK1)					Prepared: 05/18/2023 Analyzed: 05/18/2023					
1,2,4-Trimethylbenzene	ND	0.00200	mg/kg							U
1,3,5-Trimethylbenzene	ND	0.00200	"							U
Benzene	ND	0.00200	"							U
Ethylbenzene	ND	0.00200	"							U
Naphthalene	ND	0.00380	"							U
Toluene	ND	0.00200	"							U
Xylenes, total	ND	0.00200	"							U
Gasoline Range Hydrocarbons	ND	0.200	"							U
Surrogate: 1,2-Dichloroethane-d4	0.12		"	0.125		93.5	70-130			
Surrogate: Toluene-d8	0.13		"	0.125		100	70-130			
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125		94.7	70-130			

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B3E1834 - EPA 5030 (soil)

LCS (B3E1834-BS1)

Prepared: 05/18/2023 Analyzed: 05/18/2023

1,2,4-Trimethylbenzene	0.105	0.00200	mg/kg	0.100		105	70-130			
1,3,5-Trimethylbenzene	0.107	0.00200	"	0.100		107	70-130			
Benzene	0.100	0.00200	"	0.100		100	70-130			
Ethylbenzene	0.104	0.00200	"	0.100		104	70-130			
Naphthalene	0.0959	0.00380	"	0.100		95.9	70-130			
Toluene	0.0991	0.00200	"	0.100		99.1	70-130			
o-Xylene	0.105	0.00200	"	0.100		105	70-130			
m,p-Xylene	0.216	0.00400	"	0.200		108	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.11		"	0.125		84.6	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		99.1	70-130			
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125		94.4	70-130			

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3E1834 - EPA 5030 (soil)										
Matrix Spike (B3E1834-MS1)		Source: Y305496-01			Prepared: 05/18/2023 Analyzed: 05/18/2023					
1,2,4-Trimethylbenzene	0.0821	0.00200	mg/kg	0.100	ND	82.1	70-130			
1,3,5-Trimethylbenzene	0.0835	0.00200	"	0.100	ND	83.5	70-130			
Benzene	0.0936	0.00200	"	0.100	ND	93.6	70-130			
Ethylbenzene	0.0828	0.00200	"	0.100	ND	82.8	70-130			
Naphthalene	0.0861	0.00380	"	0.100	ND	86.1	70-130			
Toluene	0.0869	0.00200	"	0.100	ND	86.9	70-130			
o-Xylene	0.0841	0.00200	"	0.100	ND	84.1	70-130			
m,p-Xylene	0.170	0.00400	"	0.200	ND	85.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.12		"	0.125		92.5	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		93.8	70-130			
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125		92.3	70-130			

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3E1834 - EPA 5030 (soil)										
Matrix Spike Dup (B3E1834-MSD1)		Source: Y305496-01			Prepared: 05/18/2023 Analyzed: 05/18/2023					
1,2,4-Trimethylbenzene	0.0835	0.00200	mg/kg	0.100	ND	83.5	70-130	1.69	20	
1,3,5-Trimethylbenzene	0.0853	0.00200	"	0.100	ND	85.3	70-130	2.16	20	
Benzene	0.0973	0.00200	"	0.100	ND	97.3	70-130	3.92	20	
Ethylbenzene	0.0846	0.00200	"	0.100	ND	84.6	70-130	2.20	20	
Naphthalene	0.0909	0.00380	"	0.100	ND	90.9	70-130	5.42	20	
Toluene	0.0908	0.00200	"	0.100	ND	90.8	70-130	4.46	20	
o-Xylene	0.0859	0.00200	"	0.100	ND	85.9	70-130	2.07	20	
m,p-Xylene	0.175	0.00400	"	0.200	ND	87.3	70-130	2.40	20	
Surrogate: 1,2-Dichloroethane-d4	0.12		"	0.125		93.7	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		94.5	70-130			
Surrogate: 4-Bromofluorobenzene	0.11		"	0.125		90.3	70-130			

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control

Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Metals by EPA 6000/7000 Series Methods - Quality Control

Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B3E1830 - EPA 3050B

Blank (B3E1830-BLK1)

Prepared: 05/18/2023 Analyzed: 05/19/2023

Arsenic	ND	0.000100	mg/kg							U
Barium	ND	0.0100	"							U
Cadmium	ND	0.000100	"							U
Copper	ND	0.0100	"							U
Lead	ND	0.0100	"							U
Nickel	ND	0.0100	"							U
Selenium	ND	0.000100	"							U
Silver	ND	0.000100	"							U
Zinc	ND	0.100	"							U

LCS (B3E1830-BS1)

Prepared: 05/18/2023 Analyzed: 05/19/2023

Arsenic	0.0509	0.000100	mg/kg	0.0500		102	80-120
Barium	5.18	0.0100	"	5.00		104	80-120
Cadmium	0.0518	0.000100	"	0.0500		104	80-120
Copper	0.538	0.0100	"	0.500		108	80-120
Lead	0.0509	0.0100	"	0.0500		102	80-120
Nickel	0.0502	0.0100	"	0.0500		100	80-120
Selenium	0.0491	0.000100	"	0.0500		98.1	80-120
Silver	0.0474	0.000100	"	0.0500		94.8	80-120
Zinc	0.510	0.100	"	0.500		102	80-120

Matrix Spike (B3E1830-MS1)

Source: Y305492-17

Prepared: 05/18/2023 Analyzed: 05/19/2023

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Metals by EPA 6000/7000 Series Methods - Quality Control

Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B3E1830 - EPA 3050B

Matrix Spike (B3E1830-MS1)		Source: Y305492-17			Prepared: 05/18/2023 Analyzed: 05/19/2023					
Arsenic	6.69	0.0976	mg/kg	4.88	2.11	93.9	75-125			
Barium	547	9.76	"	488	53.6	101	75-125			
Cadmium	5.09	0.0976	"	4.88	0.0886	102	75-125			
Copper	54.7	9.76	"	48.8	4.63	102	75-125			
Lead	9.59	9.76	"	4.88	5.01	93.9	75-125			U
Nickel	9.42	9.76	"	4.88	4.73	96.1	75-125			U
Selenium	4.70	0.0976	"	4.88	0.112	94.0	75-125			
Silver	4.60	0.0976	"	4.88	0.0242	93.8	75-125			
Zinc	69.3	97.6	"	48.8	21.7	97.6	75-125			U

Matrix Spike Dup (B3E1830-MSD1)		Source: Y305492-17			Prepared: 05/18/2023 Analyzed: 05/19/2023					
Arsenic	6.68	0.0953	mg/kg	4.76	2.11	95.9	75-125	0.252	20	
Barium	546	9.53	"	476	53.6	103	75-125	0.315	20	
Cadmium	4.99	0.0953	"	4.76	0.0886	103	75-125	1.88	20	
Copper	53.7	9.53	"	47.6	4.63	103	75-125	1.70	20	
Lead	9.45	9.53	"	4.76	5.01	93.2	75-125	1.49	20	U
Nickel	9.39	9.53	"	4.76	4.73	97.9	75-125	0.267	20	U
Selenium	4.48	0.0953	"	4.76	0.112	91.6	75-125	4.91	20	
Silver	4.52	0.0953	"	4.76	0.0242	94.5	75-125	1.69	20	
Zinc	66.2	95.3	"	47.6	21.7	93.4	75-125	4.59	20	U

Batch B3E1831 - EPA 3050B

Blank (B3E1831-BLK1)		Prepared: 05/18/2023 Analyzed: 05/19/2023								
Arsenic	ND	0.000100	mg/kg							U
Barium	ND	0.0100	"							U
Cadmium	ND	0.000100	"							U

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Metals by EPA 6000/7000 Series Methods - Quality Control

Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B3E1831 - EPA 3050B

Blank (B3E1831-BLK1)

Prepared: 05/18/2023 Analyzed: 05/19/2023

Copper	ND	0.0100	mg/kg							U
Lead	ND	0.0100	"							U
Nickel	ND	0.0100	"							U
Selenium	ND	0.000100	"							U
Silver	ND	0.000100	"							U
Zinc	ND	0.100	"							U

LCS (B3E1831-BS1)

Prepared: 05/18/2023 Analyzed: 05/19/2023

Arsenic	0.0534	0.000100	mg/kg	0.0500		107	80-120
Barium	5.20	0.0100	"	5.00		104	80-120
Cadmium	0.0528	0.000100	"	0.0500		106	80-120
Copper	0.545	0.0100	"	0.500		109	80-120
Lead	0.0518	0.0100	"	0.0500		104	80-120
Nickel	0.0511	0.0100	"	0.0500		102	80-120
Selenium	0.0480	0.000100	"	0.0500		95.9	80-120
Silver	0.0464	0.000100	"	0.0500		92.9	80-120
Zinc	0.543	0.100	"	0.500		109	80-120

Matrix Spike (B3E1831-MS1)

Source: Y305496-01

Prepared: 05/18/2023 Analyzed: 05/19/2023

Arsenic	10.5	0.0958	mg/kg	4.79	6.03	94.2	75-125
Barium	630	9.58	"	479	164	97.3	75-125
Cadmium	5.12	0.0958	"	4.79	0.191	103	75-125
Copper	59.6	9.58	"	47.9	11.9	99.5	75-125
Lead	15.4	9.58	"	4.79	10.7	98.4	75-125
Nickel	17.4	9.58	"	4.79	13.6	80.3	75-125
Selenium	4.64	0.0958	"	4.79	0.269	91.3	75-125
Silver	4.36	0.0958	"	4.79	0.0429	90.1	75-125

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Metals by EPA 6000/7000 Series Methods - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3E1831 - EPA 3050B										
Matrix Spike (B3E1831-MS1)		Source: Y305496-01			Prepared: 05/18/2023 Analyzed: 05/19/2023					
Zinc	95.0	95.8	mg/kg	47.9	48.3	97.5	75-125			U
Matrix Spike Dup (B3E1831-MSD1)		Source: Y305496-01			Prepared: 05/18/2023 Analyzed: 05/19/2023					
Arsenic	10.7	0.0899	mg/kg	4.49	6.03	104	75-125	1.36	20	
Barium	712	8.99	"	449	164	122	75-125	12.3	20	
Cadmium	5.11	0.0899	"	4.49	0.191	109	75-125	0.345	20	
Copper	60.1	8.99	"	44.9	11.9	107	75-125	0.943	20	
Lead	15.8	8.99	"	4.49	10.7	114	75-125	2.71	20	
Nickel	18.2	8.99	"	4.49	13.6	104	75-125	4.66	20	
Selenium	4.57	0.0899	"	4.49	0.269	95.7	75-125	1.63	20	
Silver	4.35	0.0899	"	4.49	0.0429	95.7	75-125	0.368	20	
Zinc	96.3	89.9	"	44.9	48.3	107	75-125	1.38	20	

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Classical Chemistry Parameters - Quality Control

Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B3E1904 - DTPA Sorbitol Preparation

Blank (B3E1904-BLK1)

Prepared: 05/19/2023 Analyzed: 05/22/2023

Boron	ND	0.100	mg/L							U
-------	----	-------	------	--	--	--	--	--	--	---

Duplicate (B3E1904-DUP1)

Source: Y305493-01

Prepared: 05/19/2023 Analyzed: 05/22/2023

Boron	0.0847	0.0997	mg/L		0.0903			6.36	50	U
-------	--------	--------	------	--	--------	--	--	------	----	---

Batch B3E1905 - DTPA Sorbitol Preparation

Blank (B3E1905-BLK1)

Prepared: 05/19/2023 Analyzed: 05/22/2023

Boron	ND	0.100	mg/L							U
-------	----	-------	------	--	--	--	--	--	--	---

Duplicate (B3E1905-DUP1)

Source: Y305496-20

Prepared: 05/19/2023 Analyzed: 05/22/2023

Boron	0.913	0.100	mg/L		0.896			1.89	50	
-------	-------	-------	------	--	-------	--	--	------	----	--

Batch B3E2004 - Saturated Paste Metals

Blank (B3E2004-BLK1)

Prepared: 05/20/2023 Analyzed: 05/22/2023

SAR	0.00		SAR							U
Calcium PPM	ND	10.0	mg/L							U
Magnesium PPM	ND	10.0	"							U
Sodium PPM	ND	10.0	"							U

Duplicate (B3E2004-DUP1)

Source: Y305449-02

Prepared: 05/20/2023 Analyzed: 05/22/2023

Calcium PPM	165	10.0	mg/L		143			14.2	50	
SAR	0.00		SAR		5.66			200	200	U
Magnesium PPM	109	10.0	mg/L		105			4.07	50	
Sodium PPM	377	10.0	"		366			3.08	50	

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Classical Chemistry Parameters - Quality Control Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3E2006 - Saturated Paste Metals										
Blank (B3E2006-BLK1)					Prepared: 05/20/2023 Analyzed: 05/22/2023					
Calcium PPM	ND	10.0	mg/L							U
SAR	0.00		SAR							U
Magnesium PPM	ND	10.0	mg/L							U
Sodium PPM	ND	10.0	"							U
Duplicate (B3E2006-DUP1)					Source: Y305496-01		Prepared: 05/20/2023 Analyzed: 05/22/2023			
SAR	0.00		SAR		1.11			200	200	U
Calcium PPM	48.7	10.0	mg/L		49.1			0.879	50	
Magnesium PPM	18.9	10.0	"		19.0			0.528	50	
Sodium PPM	37.0	10.0	"		36.2			2.35	50	

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Saturated Paste - Quality Control

Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3E2005 - Saturated Paste pH/EC										
Blank (B3E2005-BLK1)					Prepared: 05/20/2023 Analyzed: 05/21/2023					
pH	0.00		pH Units							U
Specific Conductance (EC)	ND	0.00500	mmhos/cm							U
Duplicate (B3E2005-DUP1)					Source: Y305449-02		Prepared: 05/20/2023 Analyzed: 05/21/2023			
pH	7.98		pH Units		8.07			1.12	25	
Specific Conductance (EC)	3.00	0.00500	mmhos/cm		2.92			2.59	25	
Batch B3E2007 - Saturated Paste pH/EC										
Blank (B3E2007-BLK1)					Prepared: 05/20/2023 Analyzed: 05/21/2023					
Specific Conductance (EC)	ND	0.00500	mmhos/cm							U
pH	0.00		pH Units							U
Duplicate (B3E2007-DUP1)					Source: Y305496-01		Prepared: 05/20/2023 Analyzed: 05/21/2023			
pH	8.37		pH Units		8.48			1.31	25	
Specific Conductance (EC)	0.544	0.00500	mmhos/cm		0.540			0.812	25	

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

PAH by 8270D SIM - Quality Control
Waypoint Analytical, LLC.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch L683640 - 3550B

MSD (L 96711-MSD-L683640)		Source: 96711			Prepared: 05/23/2023 Analyzed: 05/24/2023					
Naphthalene	0.0892	0.00201	mg/Kg	0.166	<0.00145	53.7	30-130	3.1	30	
Dibenz(a,h)anthracene	0.0906	0.00067	"	0.166	<0.000614	54.5	30-130	0.8	30	
Fluoranthene	0.104	0.00067	"	0.166	<0.000394	62.6	30-130	0.9	30	
Benzo(k)fluoranthene	0.112	0.00067	"	0.166	<0.000437	67.4	30-130	1.8	30	
Indeno(1,2,3-cd)pyrene	0.0691	0.00067	"	0.166	<0.000627	41.6	30-130	6.7	30	
Benzo(b)fluoranthene	0.0822	0.00067	"	0.166	<0.000585	49.5	30-130	1.4	30	
Pyrene	0.104	0.00067	"	0.166	<0.000643	62.6	30-130	2.8	30	
Fluorene	0.0891	0.00067	"	0.166	<0.000286	53.6	30-130	3.6	30	
2-Methylnaphthalene	0.0789	0.00201	"	0.166	<0.00194	47.5	30-130	2	30	
Chrysene	0.116	0.00067	"	0.166	<0.000624	69.8	30-130	2.5	30	
Acenaphthene	0.094	0.00067	"	0.166	<0.000304	56.6	30-130	5.3	30	
Anthracene	0.0937	0.00067	"	0.166	<0.000334	56.4	30-130	9.4	30	
Benzo(a)anthracene	0.0971	0.00067	"	0.166	<0.000493	58.4	30-130	6.5	30	
Benzo(a)pyrene	0.0979	0.00067	"	0.166	<0.000468	58.9	30-130	5	30	
1-Methylnaphthalene	0.0948	0.00201	"	0.166	<0.00109	57.1	30-130	3.5	30	
Surrogate: Nitrobenzene-d5	50.1		"	0.331	171	50.1	29-110			
Surrogate: 2-Fluorobiphenyl	48		"	0.331	162	48	33-115			
Surrogate: 4-Terphenyl-d14	63.1		"	0.331	219	63.1	33-122			

MS (L 96711-MS-L683640)		Source: 96711			Prepared: 05/23/2023 Analyzed: 05/24/2023					
Fluorene	0.0859	0.00067	mg/Kg	0.166	<0.000286	51.7	30-130			
Benzo(k)fluoranthene	0.11	0.00067	"	0.166	<0.000437	66.2	30-130			
Pyrene	0.107	0.00067	"	0.166	<0.000643	64.4	30-130			
Indeno(1,2,3-cd)pyrene	0.0646	0.00067	"	0.166	<0.000627	38.9	30-130			
Fluoranthene	0.105	0.00067	"	0.166	<0.000394	63.2	30-130			
Dibenz(a,h)anthracene	0.0898	0.00067	"	0.166	<0.000614	54	30-130			
Chrysene	0.119	0.00067	"	0.166	<0.000624	71.6	30-130			

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

PAH by 8270D SIM - Quality Control
Waypoint Analytical, LLC.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch L683640 - 3550B

MS (L 96711-MS-L683640)		Source: 96711			Prepared: 05/23/2023 Analyzed: 05/24/2023					
2-Methylnaphthalene	0.0773	0.00201	mg/Kg	0.166	<0.00194	46.5	30-130			
Benzo(b)fluoranthene	0.081	0.00067	"	0.166	<0.000585	48.7	30-130			
Naphthalene	0.0864	0.00201	"	0.166	<0.00145	52	30-130			
1-Methylnaphthalene	0.0915	0.00201	"	0.166	<0.00109	55.1	30-130			
Acenaphthene	0.0891	0.00067	"	0.166	<0.000304	53.6	30-130			
Anthracene	0.103	0.00067	"	0.166	<0.000334	62	30-130			
Benzo(a)anthracene	0.0909	0.00067	"	0.166	<0.000493	54.7	30-130			
Benzo(a)pyrene	0.103	0.00067	"	0.166	<0.000468	62	30-130			
Surrogate: Nitrobenzene-d5	47.1		"	0.331	171	47.1	29-110			
Surrogate: 2-Fluorobiphenyl	47.4		"	0.331	162	47.4	33-115			
Surrogate: 4-Terphenyl-d14	64		"	0.331	219	64	33-122			

LCS (LCS-L683640)

Prepared: 05/23/2023 Analyzed: 05/24/2023

Pyrene	0.116	0.00067	mg/Kg	0.167		69.4	30-130			
Anthracene	0.103	0.00067	"	0.167		61.6	30-130			
Benzo(a)pyrene	0.109	0.00067	"	0.167		65.2	30-130			
1-Methylnaphthalene	0.102	0.00201	"	0.167		61	30-130			
2-Methylnaphthalene	0.0832	0.00201	"	0.167		49.8	30-130			
Acenaphthene	0.0992	0.00067	"	0.167		59.4	30-130			
Benzo(a)anthracene	0.0964	0.00067	"	0.167		57.7	30-130			
Benzo(k)fluoranthene	0.132	0.00067	"	0.167		79	30-130			
Chrysene	0.119	0.00067	"	0.167		71.2	30-130			
Naphthalene	0.0936	0.00201	"	0.167		56	30-130			
Dibenz(a,h)anthracene	0.109	0.00067	"	0.167		65.2	30-130			
Fluoranthene	0.113	0.00067	"	0.167		67.6	30-130			
Fluorene	0.0917	0.00067	"	0.167		54.9	30-130			
Indeno(1,2,3-cd)pyrene	0.0936	0.00067	"	0.167		56	30-130			

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

PAH by 8270D SIM - Quality Control
Waypoint Analytical, LLC.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch L683640 - 3550B

LCS (LCS-L683640)

Prepared: 05/23/2023 Analyzed: 05/24/2023

Benzo(b)fluoranthene	0.0816	0.00067	mg/Kg	0.167		48.8	30-130			
Surrogate: 2-Fluorobiphenyl	57.6		"	0.333		57.6	33-115			
Surrogate: Nitrobenzene-d5	60		"	0.333		60	29-110			
Surrogate: 4-Terphenyl-d14	75.3		"	0.333		75.3	33-122			

LRB (LRB-L683640)

Prepared: 05/23/2023 Analyzed: 05/24/2023

Pyrene	ND	0.00067	mg/Kg				-			
Benzo(a)anthracene	ND	0.00067	"				-			
Anthracene	ND	0.00067	"				-			
Acenaphthene	ND	0.00067	"				-			
Benzo(a)pyrene	ND	0.00067	"				-			
Fluoranthene	ND	0.00067	"				-			
2-Methylnaphthalene	ND	0.00201	"				-			
Benzo(b)fluoranthene	ND	0.00067	"				-			
Benzo(k)fluoranthene	ND	0.00067	"				-			
Dibenz(a,h)anthracene	ND	0.00067	"				-			
Fluorene	ND	0.00067	"				-			
Indeno(1,2,3-cd)pyrene	ND	0.00067	"				-			
1-Methylnaphthalene	ND	0.00201	"				-			
Naphthalene	ND	0.00201	"				-			
Chrysene	ND	0.00067	"				-			
Surrogate: 4-Terphenyl-d14	60.9		"	0.333		60.9	33-122			
Surrogate: 2-Fluorobiphenyl	44.4		"	0.333		44.4	33-115			
Surrogate: Nitrobenzene-d5	47.1		"	0.333		47.1	29-110			

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

PAH by 8270D-SIM - Quality Control
Waypoint Analytical, LLC.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch L683761 - 3550B

MSD (L 97278-MSD-L683761)		Source: 97278			Prepared: 05/24/2023 Analyzed: 05/24/2023					
2-Methylnaphthalene	0.0806	0.00201	mg/Kg	0.164	<0.00194	49.1	30-130	3.7	30	
Benzo(k)fluoranthene	0.0965	0.00067	"	0.164	<0.000437	58.8	30-130	7.9	30	
1-Methylnaphthalene	0.0908	0.00201	"	0.164	<0.00109	55.3	30-130	2	30	
Anthracene	0.103	0.00067	"	0.164	<0.000334	62.8	30-130	0	30	
Benzo(a)anthracene	0.0908	0.00067	"	0.164	<0.000493	55.3	30-130	3.3	30	
Acenaphthene	0.0905	0.00067	"	0.164	<0.000304	55.1	30-130	0.3	30	
Benzo(b)fluoranthene	0.0753	0.00067	"	0.164	<0.000585	45.9	30-130	29	30	
Pyrene	0.106	0.00067	"	0.164	<0.000643	64.6	30-130	2.8	30	
Chrysene	0.112	0.00067	"	0.164	<0.000624	68.2	30-130	3.6	30	
Dibenz(a,h)anthracene	0.0991	0.00067	"	0.164	<0.000614	60.4	30-130	13.9	30	
Fluoranthene	0.107	0.00067	"	0.164	<0.000394	65.2	30-130	1.8	30	
Fluorene	0.0881	0.00067	"	0.164	<0.000286	53.7	30-130	0.7	30	
Indeno(1,2,3-cd)pyrene	0.0779	0.00067	"	0.164	<0.000627	47.5	30-130	18.3	30	
Naphthalene	0.0841	0.00201	"	0.164	<0.00145	51.2	30-130	3.7	30	
Benzo(a)pyrene	0.0999	0.00067	"	0.164	<0.000468	60.9	30-130	2	30	
Surrogate: 2-Fluorobiphenyl	49.5		"	0.329	172	49.5	33-115			
Surrogate: 4-Terphenyl-d14	59.5		"	0.329	212	59.5	33-122			
Surrogate: Nitrobenzene-d5	41.9		"	0.329	147	41.9	29-110			

MS (L 97278-MS-L683761)		Source: 97278			Prepared: 05/24/2023 Analyzed: 05/24/2023					
Fluorene	0.0874	0.00067	mg/Kg	0.165	<0.000286	52.9	30-130			
Benzo(b)fluoranthene	0.0562	0.00067	"	0.165	<0.000585	34	30-130			
1-Methylnaphthalene	0.089	0.00201	"	0.165	<0.00109	53.9	30-130			
2-Methylnaphthalene	0.0776	0.00201	"	0.165	<0.00194	47	30-130			
Acenaphthene	0.0902	0.00067	"	0.165	<0.000304	54.6	30-130			
Anthracene	0.103	0.00067	"	0.165	<0.000334	62.4	30-130			
Naphthalene	0.081	0.00201	"	0.165	<0.00145	49	30-130			

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

PAH by 8270D-SIM - Quality Control
Waypoint Analytical, LLC.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch L683761 - 3550B

MS (L 97278-MS-L683761)		Source: 97278			Prepared: 05/24/2023 Analyzed: 05/24/2023					
Benzo(a)pyrene	0.102	0.00067	mg/Kg	0.165	<0.000468	61.8	30-130			
Benzo(k)fluoranthene	0.0891	0.00067	"	0.165	<0.000437	54	30-130			
Chrysene	0.108	0.00067	"	0.165	<0.000624	65.4	30-130			
Dibenz(a,h)anthracene	0.0862	0.00067	"	0.165	<0.000614	52.2	30-130			
Fluoranthene	0.105	0.00067	"	0.165	<0.000394	63.6	30-130			
Indeno(1,2,3-cd)pyrene	0.0648	0.00067	"	0.165	<0.000627	39.2	30-130			
Benzo(a)anthracene	0.0878	0.00067	"	0.165	<0.000493	53.2	30-130			
Pyrene	0.103	0.00067	"	0.165	<0.000643	62.4	30-130			
Surrogate: 2-Fluorobiphenyl	52.4		"	0.33	172	52.4	33-115			
Surrogate: 4-Terphenyl-d14	62.4		"	0.33	212	62.4	33-122			
Surrogate: Nitrobenzene-d5	43.6		"	0.33	147	43.6	29-110			

LCS (LCS-L683761)		Prepared: 05/24/2023 Analyzed: 05/24/2023								
1-Methylnaphthalene	0.105	0.00201	mg/Kg	0.167		62.8	30-130			
2-Methylnaphthalene	0.093	0.00201	"	0.167		55.6	30-130			
Acenaphthene	0.107	0.00067	"	0.167		64	30-130			
Anthracene	0.116	0.00067	"	0.167		69.4	30-130			
Benzo(a)anthracene	0.106	0.00067	"	0.167		63.4	30-130			
Benzo(a)pyrene	0.118	0.00067	"	0.167		70.6	30-130			
Fluorene	0.0994	0.00067	"	0.167		59.5	30-130			
Benzo(b)fluoranthene	0.0909	0.00067	"	0.167		54.4	30-130			
Indeno(1,2,3-cd)pyrene	0.0918	0.00067	"	0.167		54.9	30-130			
Naphthalene	0.0962	0.00201	"	0.167		57.6	30-130			
Pyrene	0.123	0.00067	"	0.167		73.6	30-130			
Fluoranthene	0.123	0.00067	"	0.167		73.6	30-130			
Dibenz(a,h)anthracene	0.11	0.00067	"	0.167		65.8	30-130			
Chrysene	0.127	0.00067	"	0.167		76	30-130			

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

PAH by 8270D-SIM - Quality Control
Waypoint Analytical, LLC.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch L683761 - 3550B

LCS (LCS-L683761)

Prepared: 05/24/2023 Analyzed: 05/24/2023

Benzo(k)fluoranthene	0.111	0.00067	mg/Kg	0.167		66.4	30-130			
Surrogate: 2-Fluorobiphenyl	63.3		"	0.333		63.3	33-115			
Surrogate: 4-Terphenyl-d14	76.2		"	0.333		76.2	33-122			
Surrogate: Nitrobenzene-d5	54.3		"	0.333		54.3	29-110			

LRB (LRB-L683761)

Prepared: 05/24/2023 Analyzed: 05/24/2023

Dibenz(a,h)anthracene	ND	0.00067	mg/Kg				-			
Pyrene	ND	0.00067	"				-			
Anthracene	ND	0.00067	"				-			
Benzo(k)fluoranthene	ND	0.00067	"				-			
Fluoranthene	ND	0.00067	"				-			
Benzo(b)fluoranthene	ND	0.00067	"				-			
Benzo(a)pyrene	ND	0.00067	"				-			
Benzo(a)anthracene	ND	0.00067	"				-			
Chrysene	ND	0.00067	"				-			
Acenaphthene	ND	0.00067	"				-			
2-Methylnaphthalene	ND	0.00201	"				-			
1-Methylnaphthalene	ND	0.00201	"				-			
Indeno(1,2,3-cd)pyrene	ND	0.00067	"				-			
Fluorene	ND	0.00067	"				-			
Naphthalene	ND	0.00201	"				-			
Surrogate: 4-Terphenyl-d14	77.4		"	0.333		77.4	33-122			
Surrogate: Nitrobenzene-d5	53.4		"	0.333		53.4	29-110			
Surrogate: 2-Fluorobiphenyl	62.1		"	0.333		62.1	33-115			

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Total Metals by 7196A - Quality Control Waypoint Analytical, LLC.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch L683918 -										
DUP (L 96737-DUP)	Source: Y305496-22				Prepared: Analyzed: 05/24/2023					
Chromium, Hexavalent	ND	0.5	mg/Kg		<0.500	-		0	20	
MS (L 96737-MS)	Source: Y305496-22				Prepared: Analyzed: 05/24/2023					
Chromium, Hexavalent	34.8	2.5	mg/Kg	38.9	<1.22	89	75-125			
LCS (LCS)					Prepared: Analyzed: 05/24/2023					
Chromium, Hexavalent	7.07	0.5	mg/Kg	8		88	75-125			
LRB (LRB)					Prepared: Analyzed: 05/24/2023					
Chromium, Hexavalent	0.324	0.5	mg/Kg				-			J

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

Jeremy Espinoza

Project Number: 09A1417352

Project: KMG - Newby State 30N-34Hz

Notes and Definitions

U Sample is Non-Detect.

J Estimated Value. Analyte below reported quantitation limit.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported on a wet weight basis.

Calculated results may use J-flag data (instead of reported "ND") as part of calculation to provide a more accurate result.

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini, Project Manager

June 19, 2023

Ensolum

Jeremy Espinoza

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

Project Name - KMG - Newby State 30N-34Hz

Project Number - 09A1417352

Attached are your analytical results for KMG - Newby State 30N-34Hz received by Origins Laboratory, Inc. June 08, 2023. This project is associated with Origins project number Y306198-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com



Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
NATIVE-BG05@3'	Y306198-01	Soil	June 8, 2023 9:30	06/08/2023 16:38
NATIVE-BG05@6'	Y306198-02	Soil	June 8, 2023 9:50	06/08/2023 16:38
NATIVE-BG06@3'	Y306198-03	Soil	June 8, 2023 10:24	06/08/2023 16:38
NATIVE-BG06@6'	Y306198-04	Soil	June 8, 2023 10:53	06/08/2023 16:38

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

Jeremy Espinoza

Project Number: 09A1417352

Project: KMG - Newby State 30N-34Hz

Phone: 303.433.1322 Fax: 303.265.9645

ORIGINS
LABORATORY, INC

INITIAL ☐ IMPACTED ☒ **43061a8** page ☐ of ☐ 1

www.originslab.com

Client: Ensolum LLC
Address:
Telephone Number:
Email Address: KMG Team

Project Manager: Jeremy Espinoza
Project Name: Newby 30N-34Hz
Project Number: 09A1417352
Samples Collected By: HK

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative					Full Table 915-1	BTEXN	1,2,4/1,3,5-TMB	TPH-GRO/DRO/ORO	EC/PHASAR/Baton (SP)	915 Metals	Sample Instructions	
				Unpreserved	HCl	HNO ₃	Other	Groundwater								
NATIVE-B605631	6/8/23	0930	3	X												1
NATIVE-B605631		0950	3	X												2
NATIVE-B606031		1024	3	+												3
NATIVE-B606031		1053	3	X												4
																5
																6
																7
																8
																9
																10

Relinquished By:
Date: 6/8/23 Time: 1638 Received By: CHS Date: 6/8/23 Time: 1638

Turnaround Time:
Same Day ☐ 24 hr ☐ 48 hr ☐ 72 hr ☐ Standard ☐

3.1 Date Results Needed

Origins Laboratory, Inc.

Jen Pellegrini

Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Origins Laboratory

F-012207-01-R1
Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: 4306198

Client: Ensolum

Client Project ID: Newby 30N-34Hz

Checklist Completed by: ENS

Shipped Via: Hand Delivered

(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 6/8/23

Airbill #: N/A

Matrix(s) Received: (Check all that apply): ☒ Soil/Solid ☐ Water ☐ Other: _____

Cooler Number/Temperature: 113.1 °C / _____ °C / _____ °C (Describe) _____ °C

Thermometer ID: 7004

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation and was it checked ⁽¹⁾ ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH <2 for samples preserved with HNO ₃ , HCL, H ₂ SO ₄) / (pH >10 for samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Comments (if any):				

⁽¹⁾If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Sam Lutz
Reviewed by (Project Manager)

6/8/23
Date/Time Reviewed

Origins Laboratory, Inc.

Jen Pellegrini

Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

NATIVE-BG05@3'
6/8/2023 9:30:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y306198-01 (Soil)

Boron (DTPA Sorbitol)

Boron	0.533	0.100	mg/L	1	B3F0910	06/09/2023	06/12/2023
-------	-------	-------	------	---	---------	------------	------------

Metals by Saturated Paste by EPA 6010

Calcium	4.61	0.499	meq/L	10	[CALC]	06/09/2023	06/12/2023
Magnesium	2.62	0.823	"	"	"	"	"
Sodium	2.64	0.435	"	"	"	"	"

pH in Soil by 9045D

pH	7.97		pH Units	1	B3F0916	06/09/2023	06/10/2023
----	------	--	----------	---	---------	------------	------------

SAR by 20B Saturated Paste

SAR	1.39		SAR	1	B3F0913	06/09/2023	06/12/2023
-----	------	--	-----	---	---------	------------	------------

Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.874	0.00500	mmhos/cm	1	B3F0916	06/09/2023	06/10/2023
---------------------------	-------	---------	----------	---	---------	------------	------------

Table 915 metals by EPA 6020B

Arsenic	5.65	0.0911	mg/kg	10	B3F0838	06/09/2023	06/09/2023
Barium	152	9.11	"	"	"	"	"
Cadmium	0.201	0.0911	"	"	"	"	"
Copper	10.8	9.11	"	"	"	"	"

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

NATIVE-BG05@3'
6/8/2023 9:30:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y306198-01 (Soil)

Table 915 metals by EPA 6020B

Lead	10.3	9.11	mg/kg	10	B3F0838	06/09/2023	06/09/2023	
Nickel	12.9	9.11	"	"	"	"	"	
Selenium	0.274	0.0911	"	"	"	"	"	
Silver	ND	0.0911	"	"	"	"	"	U
Zinc	ND	91.1	"	"	"	"	"	U

Total Metals by 7196A

Chromium, Hexavalent	ND	0.244	0.5	mg/Kg	1	L687705	06/08/2023	06/14/2023
----------------------	----	-------	-----	-------	---	---------	------------	------------

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini, Project Manager

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

NATIVE-BG05@6'
6/8/2023 9:50:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y306198-02 (Soil)

Boron (DTPA Sorbitol)

Boron	0.216	0.0987	mg/L	1	B3F0910	06/09/2023	06/12/2023
-------	-------	--------	------	---	---------	------------	------------

Metals by Saturated Paste by EPA 6010

Calcium	1.67	0.499	meq/L	10	[CALC]	06/09/2023	06/12/2023
Magnesium	0.945	0.823	"	"	"	"	"
Sodium	0.492	0.435	"	"	"	"	"

pH in Soil by 9045D

pH	8.06		pH Units	1	B3F0916	06/09/2023	06/10/2023
----	------	--	----------	---	---------	------------	------------

SAR by 20B Saturated Paste

SAR	0.430		SAR	1	B3F0913	06/09/2023	06/12/2023
-----	-------	--	-----	---	---------	------------	------------

Specific Conductance Mod. 9050A

Specific Conductance (EC)	0.299	0.00500	mmhos/cm	1	B3F0916	06/09/2023	06/10/2023
---------------------------	-------	---------	----------	---	---------	------------	------------

Table 915 metals by EPA 6020B

Arsenic	6.44	0.0950	mg/kg	10	B3F0838	06/09/2023	06/09/2023
Barium	144	9.50	"	"	"	"	"
Cadmium	0.120	0.0950	"	"	"	"	"
Copper	ND	9.50	"	"	"	"	" U

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

NATIVE-BG05@6'
6/8/2023 9:50:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	------------------------	--------------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y306198-02 (Soil)

Table 915 metals by EPA 6020B

Lead	ND	9.50	mg/kg	10	B3F0838	06/09/2023	06/09/2023	U
Nickel	13.7	9.50	"	"	"	"	"	
Selenium	0.231	0.0950	"	"	"	"	"	
Silver	ND	0.0950	"	"	"	"	"	U
Zinc	ND	95.0	"	"	"	"	"	U

Total Metals by 7196A

Chromium, Hexavalent	ND	0.244	0.5	mg/Kg	1	L687705	06/08/2023	06/14/2023
----------------------	----	-------	-----	-------	---	---------	------------	------------

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

NATIVE-BG06@3'
6/8/2023 10:24:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y306198-03 (Soil)

Boron (DTPA Sorbitol)

Boron	0.592	0.0990	mg/L	1	B3F0910	06/09/2023	06/12/2023
-------	-------	--------	------	---	---------	------------	------------

Metals by Saturated Paste by EPA 6010

Calcium	6.15	0.499	meq/L	10	[CALC]	06/09/2023	06/12/2023
Magnesium	3.18	0.823	"	"	"	"	"
Sodium	2.40	0.435	"	"	"	"	"

pH in Soil by 9045D

pH	7.90		pH Units	1	B3F0916	06/09/2023	06/10/2023
----	------	--	----------	---	---------	------------	------------

SAR by 20B Saturated Paste

SAR	1.11		SAR	1	B3F0913	06/09/2023	06/12/2023
-----	------	--	-----	---	---------	------------	------------

Specific Conductance Mod. 9050A

Specific Conductance (EC)	1.03	0.00500	mmhos/cm	1	B3F0916	06/09/2023	06/10/2023
---------------------------	------	---------	----------	---	---------	------------	------------

Table 915 metals by EPA 6020B

Arsenic	6.78	0.0922	mg/kg	10	B3F0838	06/09/2023	06/09/2023
Barium	173	9.22	"	"	"	"	"
Cadmium	0.224	0.0922	"	"	"	"	"
Copper	13.0	9.22	"	"	"	"	"

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

NATIVE-BG06@3'
6/8/2023 10:24:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	------------------------	--------------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y306198-03 (Soil)

Table 915 metals by EPA 6020B

Lead	12.0	9.22	mg/kg	10	B3F0838	06/09/2023	06/09/2023	
Nickel	15.4	9.22	"	"	"	"	"	
Selenium	0.292	0.0922	"	"	"	"	"	
Silver	ND	0.0922	"	"	"	"	"	U
Zinc	ND	92.2	"	"	"	"	"	U

Total Metals by 7196A

Chromium, Hexavalent	ND	0.244	0.5	mg/Kg	1	L687705	06/08/2023	06/14/2023
----------------------	----	-------	-----	-------	---	---------	------------	------------

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

NATIVE-BG06@6'
6/8/2023 10:53:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y306198-04 (Soil)

Boron (DTPA Sorbitol)

Boron	0.519	0.0995	mg/L	1	B3F0910	06/09/2023	06/12/2023
-------	-------	--------	------	---	---------	------------	------------

Metals by Saturated Paste by EPA 6010

Calcium	9.70	0.499	meq/L	10	[CALC]	06/09/2023	06/12/2023
Magnesium	5.36	0.823	"	"	"	"	"
Sodium	4.60	0.435	"	"	"	"	"

pH in Soil by 9045D

pH	7.75		pH Units	1	B3F0916	06/09/2023	06/10/2023
----	------	--	----------	---	---------	------------	------------

SAR by 20B Saturated Paste

SAR	1.68		SAR	1	B3F0913	06/09/2023	06/12/2023
-----	------	--	-----	---	---------	------------	------------

Specific Conductance Mod. 9050A

Specific Conductance (EC)	1.66	0.00500	mmhos/cm	1	B3F0916	06/09/2023	06/10/2023
---------------------------	------	---------	----------	---	---------	------------	------------

Table 915 metals by EPA 6020B

Arsenic	6.73	0.0932	mg/kg	10	B3F0838	06/09/2023	06/09/2023
Barium	163	9.32	"	"	"	"	"
Cadmium	0.157	0.0932	"	"	"	"	"
Copper	9.81	9.32	"	"	"	"	"

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

NATIVE-BG06@6'
6/8/2023 10:53:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	---------------------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y306198-04 (Soil)

Table 915 metals by EPA 6020B

Lead	9.88	9.32	mg/kg	10	B3F0838	06/09/2023	06/09/2023	
Nickel	13.1	9.32	"	"	"	"	"	
Selenium	0.252	0.0932	"	"	"	"	"	
Silver	ND	0.0932	"	"	"	"	"	U
Zinc	ND	93.2	"	"	"	"	"	U

Total Metals by 7196A

Chromium, Hexavalent	ND	0.244	0.5	mg/Kg	1	L687705	06/08/2023	06/14/2023
----------------------	----	-------	-----	-------	---	---------	------------	------------

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini, Project Manager

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Metals by EPA 6000/7000 Series Methods - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B3F0838 - EPA 3050B

Blank (B3F0838-BLK1)

Prepared: 06/09/2023 Analyzed: 06/09/2023

Arsenic	ND	0.000100	mg/kg							U
Barium	ND	0.0100	"							U
Cadmium	ND	0.000100	"							U
Copper	ND	0.0100	"							U
Lead	ND	0.0100	"							U
Nickel	ND	0.0100	"							U
Selenium	ND	0.000100	"							U
Silver	ND	0.000100	"							U
Zinc	ND	0.100	"							U

LCS (B3F0838-BS1)

Prepared: 06/09/2023 Analyzed: 06/09/2023

Arsenic	0.0504	0.000100	mg/kg	0.0500		101	80-120
Barium	5.10	0.0100	"	5.00		102	80-120
Cadmium	0.0510	0.000100	"	0.0500		102	80-120
Copper	0.559	0.0100	"	0.500		112	80-120
Lead	0.0518	0.0100	"	0.0500		104	80-120
Nickel	0.0531	0.0100	"	0.0500		106	80-120
Selenium	0.0473	0.000100	"	0.0500		94.5	80-120
Silver	0.0445	0.000100	"	0.0500		88.9	80-120
Zinc	0.514	0.100	"	0.500		103	80-120

Matrix Spike (B3F0838-MS1)

Source: Y306197-01

Prepared: 06/09/2023 Analyzed: 06/09/2023

Arsenic	8.75	0.0933	mg/kg	4.67	4.02	101	75-125
Barium	720	9.33	"	467	314	86.9	75-125
Cadmium	4.92	0.0933	"	4.67	0.199	101	75-125
Copper	57.1	9.33	"	46.7	8.68	104	75-125
Lead	12.7	9.33	"	4.67	8.42	91.5	75-125

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Metals by EPA 6000/7000 Series Methods - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3F0838 - EPA 3050B										
Matrix Spike (B3F0838-MS1)			Source: Y306197-01		Prepared: 06/09/2023 Analyzed: 06/09/2023					
Nickel	14.7	9.33	mg/kg	4.67	10.4	93.6	75-125			
Selenium	4.54	0.0933	"	4.67	0.229	92.4	75-125			
Silver	4.05	0.0933	"	4.67	0.0400	86.0	75-125			
Zinc	83.1	93.3	"	46.7	38.2	96.1	75-125			U
Matrix Spike Dup (B3F0838-MSD1)			Source: Y306197-01		Prepared: 06/09/2023 Analyzed: 06/09/2023					
Arsenic	12.9	0.0954	mg/kg	4.77	4.02	185	75-125	38.0	20	QM-07, QR-DUP
Barium	644	9.54	"	477	314	69.1	75-125	11.1	20	QM-07
Cadmium	5.02	0.0954	"	4.77	0.199	101	75-125	2.06	20	
Copper	61.4	9.54	"	47.7	8.68	110	75-125	7.21	20	
Lead	13.9	9.54	"	4.77	8.42	114	75-125	8.94	20	
Nickel	15.0	9.54	"	4.77	10.4	96.9	75-125	1.71	20	
Selenium	4.88	0.0954	"	4.77	0.229	97.5	75-125	7.26	20	
Silver	4.11	0.0954	"	4.77	0.0400	85.3	75-125	1.44	20	
Zinc	87.7	95.4	"	47.7	38.2	104	75-125	5.41	20	U

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Classical Chemistry Parameters - Quality Control

Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B3F0910 - DTPA Sorbitol Preparation

Blank (B3F0910-BLK1)

Prepared: 06/09/2023 Analyzed: 06/12/2023

Boron	ND	0.100	mg/L							U
-------	----	-------	------	--	--	--	--	--	--	---

Duplicate (B3F0910-DUP1)

Source: Y306132-01

Prepared: 06/09/2023 Analyzed: 06/12/2023

Boron	0.860	0.0997	mg/L		0.793			8.08	50	
-------	-------	--------	------	--	-------	--	--	------	----	--

Batch B3F0913 - Saturated Paste Metals

Blank (B3F0913-BLK1)

Prepared: 06/09/2023 Analyzed: 06/12/2023

SAR	0.00		SAR							U
Calcium PPM	ND	10.0	mg/L							U
Magnesium PPM	ND	10.0	"							U
Sodium PPM	ND	10.0	"							U

Duplicate (B3F0913-DUP1)

Source: Y306215-01

Prepared: 06/09/2023 Analyzed: 06/12/2023

SAR	0.00		SAR	1.93				200	200	U
Calcium PPM	18.0	10.0	mg/L	18.9				4.98	50	
Magnesium PPM	4.61	10.0	"	4.80				4.04	50	U
Sodium PPM	36.7	10.0	"	36.3				1.23	50	

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Saturated Paste - Quality Control Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3F0916 - Saturated Paste pH/EC										
Blank (B3F0916-BLK1)					Prepared: 06/09/2023 Analyzed: 06/10/2023					
pH	0.00		pH Units							U
Specific Conductance (EC)	ND	0.00500	mmhos/cm							U
Duplicate (B3F0916-DUP1)					Source: Y306215-01 Prepared: 06/09/2023 Analyzed: 06/10/2023					
pH	8.40		pH Units		8.38			0.238	25	
Specific Conductance (EC)	0.329	0.00500	mmhos/cm		0.319			3.18	25	

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Total Metals by 7196A - Quality Control Waypoint Analytical, LLC.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch L687705 -										
DUP (L 85724-DUP)		Source: Y306198-02			Prepared: Analyzed: 06/14/2023					
Chromium, Hexavalent	ND	0.502	mg/Kg		<0.502		-	0	20	
MS (L 85724-MS)		Source: Y306198-02			Prepared: Analyzed: 06/14/2023					
Chromium, Hexavalent	33.7	2.51	mg/Kg	40.1	<1.22	84	75-125			
LCS (LCS)					Prepared: Analyzed: 06/14/2023					
Chromium, Hexavalent	6.6	0.5	mg/Kg	8		83	75-125			
LRB (LRB)					Prepared: Analyzed: 06/14/2023					
Chromium, Hexavalent	ND	0.5	mg/Kg				-			

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

Jeremy Espinoza

Project Number: 09A1417352

Project: KMG - Newby State 30N-34Hz

Notes and Definitions

U Sample is Non-Detect.

QR-DUP RPD exceeds QC acceptance criteria, this indicates source sample is not homogenous.

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported on a wet weight basis.

Origins Laboratory, Inc.



Jen Pellegrini, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



July 27, 2023

Ensolum

Jeremy Espinoza

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

Project Name - KMG - Newby State 30N-34Hz

Project Number - 09A1417352

Attached are your analytical results for KMG - Newby State 30N-34Hz received by Origins Laboratory, Inc. July 24, 2023. This project is associated with Origins project number Y307495-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com



1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Ensolum

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

Jeremy Espinoza

Project Number: 09A1417352

Project: KMG - Newby State 30N-34Hz

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS10@1'	Y307495-01	Soil	July 24, 2023 12:15	07/24/2023 15:13

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

Jeremy Espinoza

Project Number: 09A1417352

Project: KMG - Newby State 30N-34Hz

Origins Laboratory

F-012207-01-R1
Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: 13074925

Client: Ensolum

Client Project ID: Newby 30N-34Hz

Checklist Completed by: JHE

Shipped Via: Hand Delivered
(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 7/24/23

Airbill #: N/A

Matrix(s) Received: (Check all that apply): X Soil/Solid Water Other:

Cooler Number/Temperature: 1/2 °C °C °C (Describe) °C

Thermometer ID: 1004

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water — is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are samples preserved that require preservation and was it checked ⁽¹⁾ ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH <2 for samples preserved with HNO ₃ , HCL, H ₂ SO ₄) / (pH >10 for samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Additional Comments (if any):				

⁽¹⁾If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by (Project Manager) JHE

Date/Time Reviewed 7/24/23

Origins Laboratory, Inc.

J. Bynon

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS10@1'

7/24/2023 12:15:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	----------	-------

Origins Laboratory, Inc.
Y307495-01 (Soil)

Boron (DTPA Sorbitol)

Boron	1.11	0.100	mg/L	1	B3G2504	KAP	07/25/2023	07/26/2023	
-------	------	-------	------	---	---------	-----	------------	------------	--

DRO/ORO by EPA 8015D

Diesel (C10-C28)	ND	25.0	mg/kg	1	B3G2424	ZZZ	07/24/2023	07/25/2023	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	ZZZ	"	"	U

Surrogate: o-Terphenyl	83.4 %	50-150			"	"	"	
------------------------	--------	--------	--	--	---	---	---	--

GBTEX+TMBs by 8260D

1,2,4-Trimethylbenzene	ND	0.00200	mg/kg	1	B3G2426	HK	07/24/2023	07/25/2023	U
1,3,5-Trimethylbenzene	ND	0.00200	"	"	"	HK	"	"	U
Benzene	ND	0.00200	"	"	"	HK	"	"	U
Ethylbenzene	ND	0.00200	"	"	"	HK	"	"	U
Toluene	ND	0.00200	"	"	"	HK	"	"	U
Xylenes, total	ND	0.00200	"	"	"	HK	"	"	U
Gasoline Range Hydrocarbons	ND	0.200	"	"	"	HK	"	"	U

Surrogate: 1,2-Dichloroethane-d4	112 %	70-130			"	"	"	
Surrogate: Toluene-d8	98.3 %	70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	101 %	70-130			"	"	"	

Metals by Saturated Paste by EPA 6010

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

SS10@1'

7/24/2023 12:15:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	----------	-------

Origins Laboratory, Inc.
Y307495-01 (Soil)

Metals by Saturated Paste by EPA 6010

Calcium	3.23	0.499	meq/L	10	[CALC]	KAP	07/25/2023	07/26/2023	
Magnesium	1.52	0.823	"	"	"	KAP	"	"	
Sodium	6.45	0.435	"	"	"	KAP	"	"	

PAH by EPA 8270E

1-Methylnaphthalene	ND	0.002	mg/kg	1	B3G2425	agile	07/24/2023	07/25/2023	U
2-Methylnaphthalene	ND	0.002	"	"	"	agile	"	"	U
Acenaphthene	ND	0.020	"	"	"	agile	"	"	U
Anthracene	ND	0.020	"	"	"	agile	"	"	U
Benzo (a) anthracene	ND	0.005	"	"	"	agile	"	"	U
Benzo (a) pyrene	ND	0.020	"	"	"	agile	"	"	U
Benzo (b) fluoranthene	ND	0.020	"	"	"	agile	"	"	U
Benzo (k) fluoranthene	ND	0.020	"	"	"	agile	"	"	U
Chrysene	ND	0.020	"	"	"	agile	"	"	U
Dibenz (a,h) anthracene	ND	0.020	"	"	"	agile	"	"	U
Fluoranthene	ND	0.020	"	"	"	agile	"	"	U
Fluorene	ND	0.020	"	"	"	agile	"	"	U
Indeno (1,2,3-cd) pyrene	ND	0.020	"	"	"	agile	"	"	U
Naphthalene	ND	0.002	"	"	"	agile	"	"	U
Pyrene	ND	0.020	"	"	"	agile	"	"	U

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

Jeremy Espinoza

Project Number: 09A1417352

Project: KMG - Newby State 30N-34Hz

SS10@1'

7/24/2023 12:15:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	---------	----------	----------	-------

Origins Laboratory, Inc.
Y307495-01 (Soil)

PAH by EPA 8270E

Surrogate: Fluorene-d10	99.5 %	60-130			B3G24 25		07/24/2023	07/25/2023	
Surrogate: Anthracene-d10	96.0 %	60-130			"		"	"	
Surrogate: Benzo (a) pyrene-d12	101 %	60-130			"		"	"	
Surrogate: Pyrene-d10	148 %	60-130			"		"	"	S-04

SAR by 20B Saturated Paste

SAR	4.18		SAR	1	B3G2501	KAP	07/25/2023	07/26/2023	
-----	------	--	-----	---	---------	-----	------------	------------	--

Specific Conductance Mod. 9050A

Specific Conductance (EC)	1.09	0.00500	mmhos/cm	1	B3G2508	HJD	07/25/2023	07/26/2023	
---------------------------	------	---------	----------	---	---------	-----	------------	------------	--

Table 915 metals by EPA 6020B

Arsenic	4.20	0.0983	mg/kg	10	B3G2433	CIH	07/24/2023	07/25/2023	
Barium	108	9.83	"	"	"	CIH	"	"	
Cadmium	0.141	0.0983	"	"	"	CIH	"	"	
Selenium	0.166	0.0983	"	"	"	CIH	"	"	

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

Jeremy Espinoza

Project Number: 09A1417352

Project: KMG - Newby State 30N-34Hz

Extractable Petroleum Hydrocarbons by 8015D - Quality Control

Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3G2424 - EPA 3550B										
Blank (B3G2424-BLK1)					Prepared: 07/24/2023 Analyzed: 07/24/2023					
Diesel (C10-C28)	ND	25.0	mg/kg							U
Residual Range Organics (C28-C40)	ND	100	"							U
Surrogate: o-Terphenyl	21		"	24.9		85.8	50-150			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

Jeremy Espinoza

Project Number: 09A1417352

Project: KMG - Newby State 30N-34Hz

Extractable Petroleum Hydrocarbons by 8015D - Quality Control

Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B3G2424 - EPA 3550B

LCS (B3G2424-BS1)

Prepared: 07/24/2023 Analyzed: 07/25/2023

Diesel (C10-C28)	816	50.0	mg/kg	1000		81.6	70-130			
Residual Range Organics (C28-C40)	872	200	"	1000		87.2	70-130			
Surrogate: o-Terphenyl	54		"	49.8		108	50-150			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

Jeremy Espinoza

Project Number: 09A1417352

Project: KMG - Newby State 30N-34Hz

Extractable Petroleum Hydrocarbons by 8015D - Quality Control

Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B3G2424 - EPA 3550B

Matrix Spike (B3G2424-MS1)		Source: Y307492-11			Prepared: 07/24/2023 Analyzed: 07/25/2023					
Diesel (C10-C28)	939	50.0	mg/kg	1000	ND	93.9	70-130			
Residual Range Organics (C28-C40)	993	200	"	1000	ND	99.3	70-130			
Surrogate: o-Terphenyl	52		"	49.8		104	50-150			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

Jeremy Espinoza

Project Number: 09A1417352

Project: KMG - Newby State 30N-34Hz

Extractable Petroleum Hydrocarbons by 8015D - Quality Control

Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B3G2424 - EPA 3550B

Matrix Spike Dup (B3G2424-MSD1)		Source: Y307492-11			Prepared: 07/24/2023 Analyzed: 07/25/2023					
Diesel (C10-C28)	819	50.0	mg/kg	1000	ND	81.9	70-130	13.6	35	
Residual Range Organics (C28-C40)	870	200	"	1000	ND	87.0	70-130	13.2	35	
Surrogate: o-Terphenyl	45		"	49.8		90.8	50-150			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Extractable Petroleum Hydrocarbons by 8015D - Quality Control

Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3G2426 - EPA 5030 (soil)										
Blank (B3G2426-BLK1)					Prepared: 07/24/2023 Analyzed: 07/25/2023					
1,2,4-Trimethylbenzene	ND	0.00200	mg/kg							U
1,3,5-Trimethylbenzene	ND	0.00200	"							U
Benzene	ND	0.00200	"							U
Ethylbenzene	ND	0.00200	"							U
Naphthalene	ND	0.00380	"							U
Toluene	ND	0.00200	"							U
Xylenes, total	ND	0.00200	"							U
Gasoline Range Hydrocarbons	ND	0.200	"							U
Surrogate: 1,2-Dichloroethane-d4	0.12		"	0.125		94.3	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		97.4	70-130			
Surrogate: 4-Bromofluorobenzene	0.11		"	0.125		86.8	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3G2426 - EPA 5030 (soil)										
LCS (B3G2426-BS1)					Prepared: 07/24/2023 Analyzed: 07/25/2023					
1,2,4-Trimethylbenzene	0.0945	0.00200	mg/kg	0.100		94.5	70-130			
1,3,5-Trimethylbenzene	0.0969	0.00200	"	0.100		96.9	70-130			
Benzene	0.101	0.00200	"	0.100		101	70-130			
Ethylbenzene	0.0920	0.00200	"	0.100		92.0	70-130			
Naphthalene	0.101	0.00380	"	0.100		101	70-130			
Toluene	0.101	0.00200	"	0.100		101	70-130			
o-Xylene	0.0966	0.00200	"	0.100		96.6	70-130			
m,p-Xylene	0.194	0.00400	"	0.200		97.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.13		"	0.125		102	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		97.2	70-130			
Surrogate: 4-Bromofluorobenzene	0.11		"	0.125		87.3	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3G2426 - EPA 5030 (soil)										
Matrix Spike (B3G2426-MS1)		Source: Y307492-01			Prepared: 07/24/2023 Analyzed: 07/25/2023					
1,2,4-Trimethylbenzene	0.0755	0.00200	mg/kg	0.100	ND	75.5	70-130			
1,3,5-Trimethylbenzene	0.0752	0.00200	"	0.100	ND	75.2	70-130			
Benzene	0.0784	0.00200	"	0.100	ND	78.4	70-130			
Ethylbenzene	0.0709	0.00200	"	0.100	ND	70.9	70-130			
Naphthalene	0.0763	0.00380	"	0.100	0.000520	75.7	70-130			
Toluene	0.0795	0.00200	"	0.100	ND	79.5	70-130			
o-Xylene	0.0689	0.00200	"	0.100	ND	68.9	70-130			QM-07
m,p-Xylene	0.142	0.00400	"	0.200	ND	70.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.12		"	0.125		96.7	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		98.6	70-130			
Surrogate: 4-Bromofluorobenzene	0.12		"	0.125		94.2	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

Jeremy Espinoza

Project Number: 09A1417352

Project: KMG - Newby State 30N-34Hz

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3G2426 - EPA 5030 (soil)										
Matrix Spike Dup (B3G2426-MSD1)		Source: Y307492-01			Prepared: 07/24/2023 Analyzed: 07/25/2023					
1,2,4-Trimethylbenzene	0.0892	0.00200	mg/kg	0.100	ND	89.2	70-130	16.6	20	
1,3,5-Trimethylbenzene	0.0947	0.00200	"	0.100	ND	94.7	70-130	23.0	20	QR-02
Benzene	0.0962	0.00200	"	0.100	ND	96.2	70-130	20.4	20	QR-02
Ethylbenzene	0.0860	0.00200	"	0.100	ND	86.0	70-130	19.3	20	
Naphthalene	0.104	0.00380	"	0.100	0.000520	103	70-130	30.6	20	QR-02
Toluene	0.0980	0.00200	"	0.100	ND	98.0	70-130	20.8	20	QR-02
o-Xylene	0.0895	0.00200	"	0.100	ND	89.5	70-130	26.0	20	QR-02
m,p-Xylene	0.175	0.00400	"	0.200	ND	87.6	70-130	21.3	20	QR-02
Surrogate: 1,2-Dichloroethane-d4	0.12		"	0.125		96.6	70-130			
Surrogate: Toluene-d8	0.12		"	0.125		97.1	70-130			
Surrogate: 4-Bromofluorobenzene	0.13		"	0.125		103	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

Jeremy Espinoza

Project Number: 09A1417352

Project: KMG - Newby State 30N-34Hz

Volatile Organic Compounds by GC/MS SW846 8260D - Quality Control

Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Metals by EPA 6000/7000 Series Methods - Quality Control

Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B3G2433 - EPA 3050B

Blank (B3G2433-BLK1)

Prepared: 07/24/2023 Analyzed: 07/25/2023

Arsenic	ND	0.000100	mg/kg
Barium	ND	0.0100	"
Cadmium	ND	0.000100	"
Copper	ND	0.0100	"
Lead	ND	0.0100	"
Nickel	ND	0.0100	"
Selenium	ND	0.000100	"
Silver	ND	0.000100	"
Zinc	ND	0.100	"

LCS (B3G2433-BS1)

Prepared: 07/24/2023 Analyzed: 07/25/2023

Arsenic	0.0491	0.000100	mg/kg	0.0500	98.2	80-120
Barium	5.29	0.0100	"	5.00	106	80-120
Cadmium	0.0530	0.000100	"	0.0500	106	80-120
Copper	0.540	0.0100	"	0.500	108	80-120
Lead	0.0530	0.0100	"	0.0500	106	80-120
Nickel	0.0511	0.0100	"	0.0500	102	80-120
Selenium	0.0486	0.000100	"	0.0500	97.3	80-120
Silver	0.0529	0.000100	"	0.0500	106	80-120
Zinc	0.493	0.100	"	0.500	98.6	80-120

Matrix Spike (B3G2433-MS1)

Source: Y307495-01

Prepared: 07/24/2023 Analyzed: 07/25/2023

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Metals by EPA 6000/7000 Series Methods - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3G2433 - EPA 3050B										
Matrix Spike (B3G2433-MS1)		Source: Y307495-01			Prepared: 07/24/2023 Analyzed: 07/25/2023					
Arsenic	10.2	0.0961	mg/kg	4.81	4.20	124	75-125			
Barium	635	9.61	"	481	108	110	75-125			
Cadmium	5.22	0.0961	"	4.81	0.141	106	75-125			
Copper	57.8	9.61	"	48.1	8.55	102	75-125			
Lead	15.2	9.61	"	4.81	8.10	147	75-125			QM-07
Nickel	17.0	9.61	"	4.81	10.3	140	75-125			QM-07
Selenium	4.64	0.0961	"	4.81	0.166	93.1	75-125			
Silver	4.94	0.0961	"	4.81	0.0295	102	75-125			
Zinc	90.9	96.1	"	48.1	39.3	107	75-125			
Matrix Spike Dup (B3G2433-MSD1)		Source: Y307495-01			Prepared: 07/24/2023 Analyzed: 07/25/2023					
Arsenic	9.08	0.0957	mg/kg	4.79	4.20	102	75-125	11.4	20	
Barium	589	9.57	"	479	108	100	75-125	7.51	20	
Cadmium	5.10	0.0957	"	4.79	0.141	104	75-125	2.34	20	
Copper	67.4	9.57	"	47.9	8.55	123	75-125	15.3	20	
Lead	14.5	9.57	"	4.79	8.10	134	75-125	4.23	20	QM-07
Nickel	15.6	9.57	"	4.79	10.3	111	75-125	8.66	20	
Selenium	4.50	0.0957	"	4.79	0.166	90.6	75-125	3.00	20	
Silver	4.95	0.0957	"	4.79	0.0295	103	75-125	0.199	20	
Zinc	90.2	95.7	"	47.9	39.3	106	75-125	0.752	20	

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

EPA 8270E (SW846) - Semivolatile Organic Compounds - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B3G2425 - EPA 3580

Blank (B3G2425-BLK1)

Prepared: 07/24/2023 Analyzed: 07/25/2023

1-Methylnaphthalene	ND	0.002	mg/kg							U
2-Methylnaphthalene	ND	0.002	"							U
Acenaphthene	ND	0.020	"							U
Anthracene	ND	0.020	"							U
Benzo (a) anthracene	ND	0.005	"							U
Benzo (a) pyrene	ND	0.020	"							U
Benzo (b) fluoranthene	ND	0.020	"							U
Benzo (g,h,i) perylene	ND	0.020	"							U
Benzo (k) fluoranthene	ND	0.020	"							U
Chrysene	ND	0.020	"							U
Dibenz (a,h) anthracene	ND	0.020	"							U
Fluoranthene	ND	0.020	"							U
Fluorene	ND	0.020	"							U
Indeno (1,2,3-cd) pyrene	ND	0.020	"							U
Naphthalene	ND	0.002	"							U
Phenanthrene	ND	0.020	"							U
Pyrene	ND	0.020	"							U
Surrogate: Fluorene-d10	200		ug/kg	200		101	60-130			
Surrogate: Anthracene-d10	200		"	200		98.1	60-130			
Surrogate: Benzo (a) pyrene-d12	200		"	200		101	60-130			
Surrogate: Pyrene-d10	200		"	200		99.1	60-130			

LCS (B3G2425-BS1)

Prepared: 07/24/2023 Analyzed: 07/25/2023

1-Methylnaphthalene	0.181	0.002	mg/kg	0.200		90.6	70-130			
2-Methylnaphthalene	0.189	0.002	"	0.200		94.4	70-130			
Acenaphthene	0.178	0.020	"	0.200		89.1	70-130			
Anthracene	0.146	0.020	"	0.200		73.0	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

EPA 8270E (SW846) - Semivolatile Organic Compounds - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B3G2425 - EPA 3580

LCS (B3G2425-BS1)

Prepared: 07/24/2023 Analyzed: 07/25/2023

Benzo (a) anthracene	0.184	0.005	mg/kg	0.200		91.8	70-130
Benzo (a) pyrene	0.181	0.020	"	0.200		90.5	70-130
Benzo (b) fluoranthene	0.189	0.020	"	0.200		94.6	70-130
Benzo (g,h,i) perylene	0.176	0.020	"	0.200		88.1	70-130
Benzo (k) fluoranthene	0.176	0.020	"	0.200		87.9	70-130
Chrysene	0.172	0.020	"	0.200		85.9	70-130
Dibenz (a,h) anthracene	0.204	0.020	"	0.200		102	70-130
Fluoranthene	0.175	0.020	"	0.200		87.4	70-130
Fluorene	0.182	0.020	"	0.200		90.8	70-130
Indeno (1,2,3-cd) pyrene	0.179	0.020	"	0.200		89.3	70-130
Naphthalene	0.199	0.002	"	0.200		99.6	70-130
Phenanthrene	0.166	0.020	"	0.200		83.0	70-130
Pyrene	0.198	0.020	"	0.200		99.2	70-130
Surrogate: Fluorene-d10	200		ug/kg	200		101	60-130
Surrogate: Anthracene-d10	200		"	200		97.8	60-130
Surrogate: Benzo (a) pyrene-d12	210		"	200		103	60-130
Surrogate: Pyrene-d10	210		"	200		107	60-130

Matrix Spike (B3G2425-MS1)

Source: Y307492-01

Prepared: 07/24/2023 Analyzed: 07/25/2023

1-Methylnaphthalene	0.188	0.002	mg/kg	0.200	ND	94.0	70-130
2-Methylnaphthalene	0.200	0.002	"	0.200	ND	99.8	70-130
Acenaphthene	0.186	0.020	"	0.200	0.0004	93.0	70-130
Anthracene	0.153	0.020	"	0.200	ND	76.7	70-130
Benzo (a) anthracene	0.178	0.005	"	0.200	ND	89.2	70-130
Benzo (a) pyrene	0.179	0.020	"	0.200	ND	89.7	70-130
Benzo (b) fluoranthene	0.195	0.020	"	0.200	0.0003	97.1	70-130
Benzo (g,h,i) perylene	0.182	0.020	"	0.200	ND	91.1	70-130

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

EPA 8270E (SW846) - Semivolatile Organic Compounds - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B3G2425 - EPA 3580

Matrix Spike (B3G2425-MS1)		Source: Y307492-01			Prepared: 07/24/2023 Analyzed: 07/25/2023					
Benzo (k) fluoranthene	0.179	0.020	mg/kg	0.200	0.0008	88.9	70-130			
Chrysene	0.182	0.020	"	0.200	0.001	90.6	70-130			
Dibenz (a,h) anthracene	0.216	0.020	"	0.200	ND	108	70-130			
Fluoranthene	0.188	0.020	"	0.200	0.002	93.1	70-130			
Fluorene	0.191	0.020	"	0.200	ND	95.4	70-130			
Indeno (1,2,3-cd) pyrene	0.182	0.020	"	0.200	ND	90.9	70-130			
Naphthalene	0.204	0.002	"	0.200	0.0009	101	70-130			
Phenanthrene	0.178	0.020	"	0.200	ND	88.9	70-130			
Pyrene	0.218	0.020	"	0.200	0.005	106	70-130			
Surrogate: Fluorene-d10	200		ug/kg	200		101	60-130			
Surrogate: Anthracene-d10	200		"	200		99.4	60-130			
Surrogate: Benzo (a) pyrene-d12	210		"	200		103	60-130			
Surrogate: Pyrene-d10	220		"	200		108	60-130			

Matrix Spike Dup (B3G2425-MSD1)		Source: Y307492-01			Prepared: 07/24/2023 Analyzed: 07/25/2023					
1-Methylnaphthalene	0.194	0.002	mg/kg	0.200	ND	96.9	70-130	3.05	20	
2-Methylnaphthalene	0.197	0.002	"	0.200	ND	98.7	70-130	1.16	20	
Acenaphthene	0.183	0.020	"	0.200	0.0004	91.5	70-130	1.70	20	
Anthracene	0.150	0.020	"	0.200	ND	74.9	70-130	2.42	20	
Benzo (a) anthracene	0.172	0.005	"	0.200	ND	85.9	70-130	3.77	20	
Benzo (a) pyrene	0.167	0.020	"	0.200	ND	83.7	70-130	7.00	20	
Benzo (b) fluoranthene	0.201	0.020	"	0.200	0.0003	100	70-130	3.00	20	
Benzo (g,h,i) perylene	0.180	0.020	"	0.200	ND	90.2	70-130	0.950	20	
Benzo (k) fluoranthene	0.186	0.020	"	0.200	0.0008	92.7	70-130	4.18	20	
Chrysene	0.189	0.020	"	0.200	0.001	93.7	70-130	3.39	20	
Dibenz (a,h) anthracene	0.214	0.020	"	0.200	ND	107	70-130	1.35	20	
Fluoranthene	0.184	0.020	"	0.200	0.002	91.2	70-130	1.97	20	

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

EPA 8270E (SW846) - Semivolatile Organic Compounds - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3G2425 - EPA 3580										
Matrix Spike Dup (B3G2425-MSD1)	Source: Y307492-01				Prepared: 07/24/2023 Analyzed: 07/25/2023					
Fluorene	0.185	0.020	mg/kg	0.200	ND	92.3	70-130	3.35	20	
Indeno (1,2,3-cd) pyrene	0.184	0.020	"	0.200	ND	91.8	70-130	1.02	20	
Naphthalene	0.207	0.002	"	0.200	0.0009	103	70-130	1.55	20	
Phenanthrene	0.175	0.020	"	0.200	ND	87.4	70-130	1.76	20	
Pyrene	0.213	0.020	"	0.200	0.005	104	70-130	2.01	20	
Surrogate: Fluorene-d10	200		ug/kg	200		101	60-130			
Surrogate: Anthracene-d10	200		"	200		99.4	60-130			
Surrogate: Benzo (a) pyrene-d12	210		"	200		103	60-130			
Surrogate: Pyrene-d10	220		"	200		108	60-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum
11049 W 44th Avenue, Suite 103
Wheat Ridge CO 80033

Jeremy Espinoza
Project Number: 09A1417352
Project: KMG - Newby State 30N-34Hz

Classical Chemistry Parameters - Quality Control

Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B3G2501 - Saturated Paste Metals

Blank (B3G2501-BLK1)

Prepared: 07/25/2023 Analyzed: 07/26/2023

SAR	0.00		SAR
Calcium PPM	ND	10.0	mg/L
Magnesium PPM	ND	10.0	"
Sodium PPM	ND	10.0	"

Duplicate (B3G2501-DUP1)

Source: Y307495-01

Prepared: 07/25/2023 Analyzed: 07/26/2023

Calcium PPM	30.0	10.0	mg/L	64.8	73.4	50	QR-DUP
SAR	0.00		SAR	4.18	200	200	
Magnesium PPM	29.8	10.0	mg/L	18.5	46.8	50	
Sodium PPM	565	10.0	"	148	117	50	QR-DUP

Batch B3G2504 - DTPA Sorbitol Preparation

Blank (B3G2504-BLK1)

Prepared: 07/25/2023 Analyzed: 07/26/2023

Boron	ND	0.100	mg/L
-------	----	-------	------

Duplicate (B3G2504-DUP1)

Source: Y307492-01

Prepared: 07/25/2023 Analyzed: 07/26/2023

Boron	0.326	0.100	mg/L	0.413	23.4	50	
-------	-------	-------	------	-------	------	----	--

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

Jeremy Espinoza

Project Number: 09A1417352

Project: KMG - Newby State 30N-34Hz

Saturated Paste - Quality Control

Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B3G2508 - Saturated Paste pH/EC										
Blank (B3G2508-BLK1)					Prepared: 07/25/2023 Analyzed: 07/26/2023					
Specific Conductance (EC)	ND	0.00500	mmhos/cm							
Duplicate (B3G2508-DUP1)					Source: Y307495-01 Prepared: 07/25/2023 Analyzed: 07/26/2023					
Specific Conductance (EC)	2.47	0.00500	mmhos/cm		1.09			77.5	25	QR-DUP

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ensolum

11049 W 44th Avenue, Suite 103

Wheat Ridge CO 80033

Jeremy Espinoza

Project Number: 09A1417352

Project: KMG - Newby State 30N-34Hz

Notes and Definitions

U Sample is Non-Detect.

S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

QR-DUP RPD exceeds QC acceptance criteria, this indicates source sample is not homogenous.

QR-02 The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported at a wet weight basis.

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.