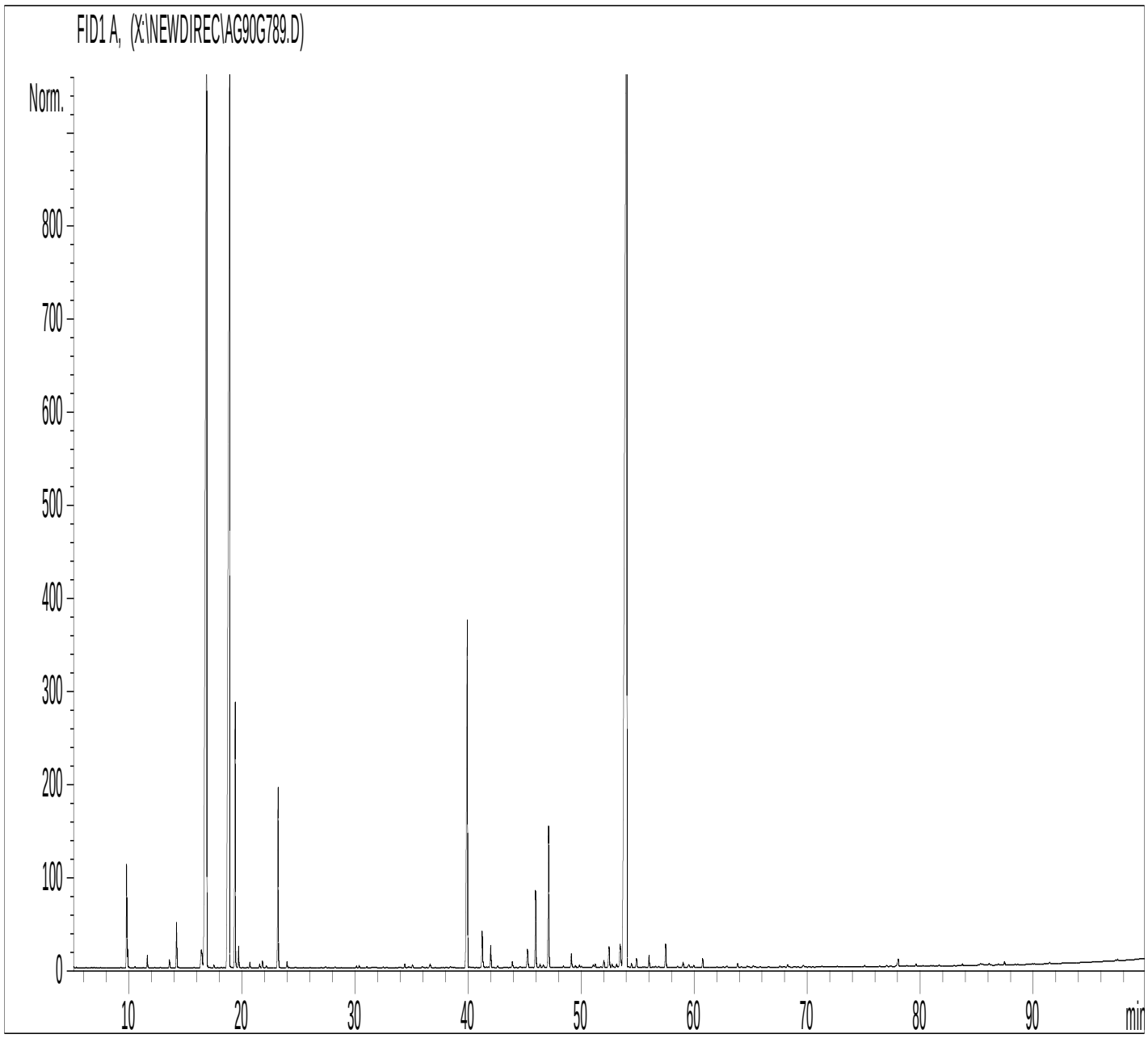
NEW DIRECTIONS AROMATICS

GCMS ANALYSIS

PRODUCT NAME: DILL WEED ORGANIC ESSENTIAL OIL – 50028
DATE: May 17, 2016



Due to volume turnover, this report is not lot specific. It is representative of the quality of this oil produced by the manufacturer of this product. Specific lots may vary slightly as is the case in natural products.

NEW DIRECTIONS AROMATICS

GCMS ANALYSIS *(cont'd.)*

PRODUCT NAME: DILL WEED ORGANIC ESSENTIAL OIL – 50028

Peak	RT (min)	COMPONENT name	%
1	5,1	ACETONE	0,01
2	7,5	FURAN 2-ETHYL	0,01
3	9,3	TRICYCLENE	0,01
4	9,7	α-PINENE	0,93
5	9,8	α-THUYENE	0,18
6	10,5	TOLUENE	0,01
7	11,6	CAMPHENE	0,13
8	13,6	β-PINENE	0,09
9	14,2	SABINENE	0,50
10	15,7	Δ3-CARENE	0,01
11	16,4	β-MYRCENE	0,43
12	16,8	**α-PHELLANDRENE**	**22,81**
13	17,5	α-TERPINENE	0,03
14	18,1	2,3-DEHYDRO-1,8-CINEOLE	0,01
15	18,9	**LIMONENE**	**20,48**
16	19,4	**β-PHELLANDRENE**	**3,08**
17	19,7	1,3,8-p-MENTHATRIENE	0,23
18	20,4	FURAN 2-PENTYL	0,01
19	20,7	Cis-β-OCIMENE	0,06
20	21,6	γ-TERPINENE	0,04
21	21,8	Trans-β-OCIMENE	0,07
22	22,1	3-OCTANONE	0,03
23	23,2	p-CYMENE	2,10
24	23,9	TERPINOLENE	0,07
25	27,4	PENTYL CYCLOHEXADIENE	0,02
26	28,2	1-HEXANOL	0,01
27	30,1	3-HEXEN-1-OL	0,02
28	30,3	1-OCTEN-3-OL ACETATE	0,03
29	31,0	3-OCTANOL	0,02
30	31,5	NONANAL	0,04

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NEW DIRECTIONS AROMATICS

GCMS ANALYSIS *(cont'd.)*

PRODUCT NAME: DILL WEED ORGANIC ESSENTIAL OIL – 50028

Peak	RT (min)	COMPONENT name	%
31	32,5	FENCHONE	0,01
32	32,7	HEXYL BUTYRATE	0,01
33	33,9	CARVEOL ISOMER	0,01
34	34,3	α,p-DIMETHYLSTYRENE	0,04
35	34,7	β-THUYONE	0,01
36	35,0	LIMONENE Cis-1,2-EPOXYDE	0,04
37	35,9	LIMONENE Trans-1,2-EPOXYDE	0,02
38	36,0	Cis-THUYANOL	0,01
39	36,6	δ-ELEMENE	0,06
40	38,0	SESQUITERPENE	0,01
41	38,4	α-CUBEBENE	0,02
42	39,9	**3,9-époxy-p-MENTH-1-ENE (DILL ETHER)**	**5,74**
43	41,2	LINALOOL	0,44
44	41,3	p-MENTH-3-EN-7-AL + β-CUBEBENE	0,06
45	42,0	LINALYL ACETATE	0,28
46	42,6	Trans-p-MENTH-2-EN-1-OL	0,03
47	43,9	BORNYL ACETATE	0,10
48	44,6	SESQUITERPENE	0,03
49	45,1	TERPINENE-4-OL	0,12
50	45,2	β-CARYOPHYLLENE	0,19
51	46,0	Cis-DIHYDROCARVONE	1,01
52	46,3	SESQUITERPENIC EPOXIDE	0,05
53	46,6	Cis-p-2,8-MENTHADIEN-1-OL+COMPONENT Mw=152	0,05
54	47,1	Trans-DIHYDROCARVONE	1,94
55	48,4	Trans-PINOCARVEOL	0,03
56	49,1	E-β-FARNESENE	0,18
57	49,3	Trans-p-2,8-MENTHADIEN-1-OL	0,01
58	49,4	α-HUMULENE	0,03
59	50,5	CARVOTANACETONE	0,05
60	51,0	α-TERPINEOL	0,06
61	51,2	BORNEOL	0,05

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NEW DIRECTIONS AROMATICS

GCMS ANALYSIS *(cont'd.)*

PRODUCT NAME: DILL SEED ESSENTIAL OIL – 11050

Peak	RT (min)	COMPONENT name	%
62	52,0	α-GURJUNENE	0,11
63	52,5	GERMACRENE D	0,36
64	52,7	SESQUITERPENE	0,05
65	53,1	BICYCLOGERMACRENE	0,06
66	53,4	PIPERITONE	0,46
67	54,0	**CARVONE**	**34,88**
68	54,4	GERANYL ACETATE	0,06
69	54,8	δ-CADINENE	0,13
70	55,1	γ-CADINENE	0,01
71	55,4	Trans-CARVYL ACETATE	0,01
72	56,0	Cis-DIHYDROCARVEOL	0,15
73	56,3	CUMINAL	0,01
74	56,6	SABINOL ISOMER	0,02
75	56,8	Cis-CARVYL ACETATE	0,03
76	57,5	Trans-DIHYDROCARVEOL	0,33
77	58,5	2,4-DECADIENAL	0,02
78	59,0	Epi-β-SANTALYL ACETATE	0,08
79	59,5	Trans-CARVEOL	0,06
80	59,7	CARVONE OXIDE	0,01
81	60,0	ISOPIPERITONE	0,03
82	60,7	Cis-CARVEOL + UNDECATRIENE ISOMER	0,11
83	62,5	CARVEOL ISOMER	0,01
84	62,9	SABINOL ISOMER	0,02
85	63,8	NAPHTALENE TETRAHYDRO DIMETHYL	0,05
86	64,1	PIPERITENONE	0,01
87	64,6	TERPENIC COMPONENT	0,02
88	64,8	TERPENIC COMPONENT	0,01
89	65,2	COMPONENT Mw=192	0,01
90	65,4	SESQUITERPENIC EPOXIDE	0,02
91	65,8	SESQUITERPENIC EPOXIDE	0,03
92	66,6	TERPENIC ACETATE	0,01

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NEW DIRECTIONS AROMATICS

GCMS ANALYSIS *(cont'd.)*

PRODUCT NAME: DILL SEED ESSENTIAL OIL – 11050

Peak	RT (min)	COMPONENT name	%
93	67,5	TERPENIC ACETATE	0,02
94	68,2	CARYOPHYLLENE EPOXIDE	0,04
95	68,8	METHYLEUGENOL	0,02
96	69,7	TERPENIC ACETATE	0,04
97	71,3	β-BISABOLOL	0,03
98	72,6	SESQUITERPENOL	0,01
99	75,0	PENTADECANONE TRIMETHYL	0,02
100	77,0	SESQUITERPENIC EPOXIDE	0,02
101	78,0	SESQUITERPENOL + α-SINENSAL	0,16
102	78,8	CARVACROL	0,02
103	79,6	LACHNOPHYLLUM METHYL ESTER	0,03
104	81,6	MYRISTICINE	0,02
105	83,7	MATRICARIA ESTER	0,03
106	85,3	LIMONENE DIOL ISOMER	0,05
107	86,0	DILLAPIOL	0,02
108	86,9	COMPONENT Mw=168	0,02
109	87,4	POLYOXYGENATED COMPONENT	0,05
110	89,9	HYDROXYKETONIC COMPONENT	0,01
111	90,0	COUMARIN	0,01
112	91,4	AROMATIC COMPONENT	0,04
		TOTAL	**99,99**

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