2014 Mid-Year Crude Average CI Estimate

Important Notice: In response to a request from stakeholders, this mid-year crude average carbon intensity estimate is being posted for informational purposes only. Volumes of crude oils and the mid-year carbon intensity estimate in this document are preliminary estimates only and are subject to revision prior to or during calculation of the 2014 Annual Crude Average Carbon Intensity.

2014 Mid-Year Crude Average CI Estimate: The 2014 Mid-Year Crude Average CI estimate is a volume-weighted average of carbon intensities for crudes supplied to California during the first six months of 2014. The table below shows a breakdown of the sources of crude oil supplied to California refineries during the first six months of 2014 and the carbon intensity values assigned to these crude sources. All crude oil produced in and offshore of California is assumed to be refined in California. The volume contributions for California produced crudes are based on oil production data obtained from the California Department of Conservation.[1] The volume contributions for California federal offshore crudes are based on oil production data obtained from the Bureau of Safety and Environmental Enforcement.[2] Complete data for federal offshore crudes was not available for the first six months of 2014, so volumes were assumed to be half of the 2013 annual volume. The volume contributions of imported crudes are based on oil supply data submitted by refineries via quarterly compliance reporting. Twenty-four crude names that do not appear in Table 8 (the Crude Lookup Table in section 95486(b)(1)) were supplied to California refineries during the first six months of 2014. These crudes contributed only 8.2 percent of the total volume of crude supplied to California refineries and are assigned the 2010 Baseline Crude Average CI value of 11.39 gCO_2e/MJ. The 2014 Mid-Year Crude Average carbon intensity estimate, 11.22 gCO_2e/MJ, is calculated by weighting the carbon intensity value for each crude by the volume supplied to California refineries during the first six months of 2014.

2014 Mid-Year Crude Average Carbon Intensity Estimate

Country/State	Crude Name	CI (g/MJ)	2014 Mid-Year Volume (bbl)
Angola	Pazflor	11.39	7,330,062
Brazil	Lula	11.39	114,572
	Sapinhoa	11.39	2,032,664
Canada	Access Western Blend	11.39	598,010
	Albian Heavy Synthetic	21.02	916,892
	Canadian Light Sweet	11.39	3,119
	Cold Lake	18.74	3,396,047
	Fosterton	11.39	548,144

[1] California Department of Conservation, Online Production and Injection Query, http://opi.consrv.ca.gov/opi/opi.dll, (accessed September 15, 2014).
[2] Bureau of Safety and Environmental Enforcement website http://www.data.bsee.gov/homepg/data_center/production/PacificFreeProd.asp, (accessed May 2014).

	Koch Alberta	7.61	87,459
	Light Sweet	11.39	159,305
	Peace River Sour	11.39	13,736
	Premium Albian Synthetic	11.39	607,000
	Suncor Synthetic (all grades)	24.49	957,922
Colombia	Castilla	6.45	9,716,700
	Magdalena	11.39	2,519,395
	South Blend	11.39	1,287,582
	Vasconia	6.63	2,812,608
Ecuador	Napo	7.45	7,823,602
	Oriente	9.34	16,666,042
Equatorial Guinea	Ceiba	11.39	478,697
Iraq	Basra Light	12.08	33,858,661
Mexico	Isthmus	11.39	2,477,217
Peru	Loreto	5.82	1,781,179
	Mayna	7.14	162,000
Russia	ESPO	12.09	18,888
	Sokol	11.39	489,585
Saudi Arabia	Arab Extra Light	6.86	14,074,511
	Arab Light	6.75	37,221,680
	Arab Medium	11.39	787,700
Venezuela	Boscan	12.53	472,880
	Hamaca	11.39	652,084
	Hamaca DCO	11.39	621,000
US Alaska	ANS	12.81	36,478,321
US Colorado	Niobrara	11.39	338,310
US New Mexico	Four Corners	11.39	409,935
US North Dakota	Bakken	11.39	1,456,517
	Williston Basin Sweet	11.39	685,101
US Utah	Covenant	11.39	164,776
	Utah Sweet	11.39	176,008
US Wyoming	Wyoming	11.39	505,799
US California*	Aliso Canyon	1.97	103,483
	Ant Hill	26.37	25,678
	Antelope Hills	2.69	62,118
	Antelope Hills, North	13.16	148,181
	Arroyo Grande	27.81	197,515
	Asphalto	7.92	117,337
	Bandini	7.75	2,917
	Bardsdale	5.24	79,478
	Barham Ranch	2.74	38,312

	Beer Nose	2.18	7,922
	Belgian Anticline	3.62	19,263
	Bellevue	8.27	12,998
	Bellevue, West	8.63	4,793
	Belmont, Offshore	3.19	340,551
	Belridge, North	5.00	1,075,325
	Belridge, South	14.49	11,748,963
	Beverly Hills	3.33	350,160
	Big Mountain	3.15	14,683
	Blackwells Corner	11.05	5,681
	Brea-Olinda	2.97	521,304
	Buena Vista	13.61	575,458
	Burrel	16.44	7,188
	Cabrillo	2.84	12,714
	Canal	4.04	12,913
	Canfield Ranch	3.58	54,196
	Caneros Creek	2.96	9,636
	Cascade	2.20	69,655
	Casmalia	11.61	99,335
	Castaic Hills	2.79	3,051
	Cat Canyon	5.09	879,176
	Cheviot Hills	3.06	24,917
	Chico-Martinez	3.83	73,456
	Cienaga Canyon	3.89	11,590
	Coalinga	25.36	2,893,527
	Coles Levee, N	3.47	106,032
	Coles Levee, S	4.27	35,554
	Comanche	10.75	10,728
	Coyote, East	5.59	124,208
	Cuyama, South	11.86	104,984
	Cymric	19.91	7,623,926
	Deer Creek	18.29	23,940
	Del Valle	4.30	28,053
	Devils Den	3.63	9,345
	Edison	9.03	415,813
	El Segundo	2.98	12,421
	Elk Hills	5.36	5,840,453
	Elwood, S., Offshore	4.18	689,456
	Fruitvale	10.24	202,398
	Greeley	8.14	59,331
	Hasley Canyon	2.07	16,064

	Helm	3.35	32,780
	Holser	3.01	8,809
	Honor Rancho	2.69	14,410
	Huntington Beach	7.80	1,101,486
	Hyperion	1.65	5,198
	Inglewood	8.74	1,312,630
	Jacalitos	2.22	62,069
	Jasmin	17.54	65,596
	Kern Front	25.06	2,135,662
	Kern River	9.55	12,504,394
	Kettleman Middle Dome	3.53	30,906
	Kettleman North Dome	4.70	24,141
	Landslide	10.49	14,117
	Las Cienegas	4.46	143,531
	Livermore	2.17	6,688
	Lompoc	31.05	159,443
	Long Beach	5.12	679,719
	Long Beach Airport	3.73	5,458
	Los Angeles Downtown	4.11	2,894
	Los Angeles, East	8.28	14,245
	Lost Hills	11.40	5,516,505
	Lost Hills, Northwest	4.35	13,495
	Lynch Canyon	7.73	138,067
	Mahala	3.57	5,963
	McCool Ranch	1.71	8,626
	McDonald Anticline	4.92	30,168
	McKittrick	15.47	1,522,076
	Midway-Sunset	21.18	14,418,802
	Montalvo, West	2.63	295,240
	Montebello	10.29	248,914
	Monument Junction	3.81	53,873
	Mount Poso	20.57	610,720
	Mountain View	4.42	50,564
	Newhall-Potrero	2.83	57,443
	Newport, West	4.33	43,510
	Oak Canyon	3.81	10,888
	Oak Park	2.13	8,406
	Oakridge	2.57	70,453
	Oat Mountain	1.90	43,231
	Ojai	3.27	132,124
	Olive	1.93	49,500

	Orcutt	12.52	694,455
	Oxnard	16.89	115,485
	Paloma	3.42	9,306
	Placerita	31.66	447,209
	Playa Del Rey	6.04	24,369
	Pleito	4.01	420,822
	Poso Creek	28.41	1,716,027
	Pyramid Hills	2.92	26,479
	Railroad Gap	6.56	50,383
	Raisin City	7.64	68,657
	Ramona	3.37	21,575
	Richfield	3.63	154,429
	Rincon	2.93	146,139
	Rio Bravo	4.85	171,937
	Rio Viejo	2.50	30,669
	Riverdale	2.99	35,553
	Rose	2.10	297,027
	Rosecrans	5.18	77,614
	Rosecrans, South	3.11	4,716
	Rosedale	6.60	4,686
	Rosedale Ranch	8.84	81,708
	Round Mountain	28.73	2,139,423
	Russell Ranch	6.56	29,400
	Salt Lake	2.82	28,307
	Salt Lake, South	3.68	14,266
	San Ardo	28.82	3,544,277
	San Miguelito	4.44	230,544
	San Vicente	2.31	126,520
	Sansinena	2.54	81,578
	Santa Clara Avenue	3.31	29,602
	Santa Fe Springs	11.34	547,561
	Santa Maria Valley	6.48	112,938
	Santa Susana	3.14	8,450
	Sargent	4.77	16,835
	Saticoy	3.26	20,379
	Sawtelle	2.83	87,796
	Seal Beach	4.07	245,906
	Semitropic	3.39	19,157
	Sespe	2.91	210,103
	Shafter, North	2.54	416,267
	Shiells Canyon	3.24	41,490

	South Mountain	3.10	377,744
	Stockdale	1.71	65,363
	Tapia	6.42	13,278
	Tapo Canyon, South	2.87	4,301
	Tejon	7.96	230,042
	Tejon Hills	5.74	7,718
	Tejon, North	4.72	19,301
	Temescal	3.10	36,806
	Ten Section	6.22	47,899
	Timber Canyon	3.30	16,334
	Torrance	4.45	184,505
	Torrey Canyon	2.88	53,606
	Union Avenue	1.79	4,608
	Ventura	4.35	2,574,062
	Wayside Canyon	2.93	13,869
	West Mountain	2.89	4,496
	Wheeler Ridge	3.34	31,338
	White Wolf	1.64	5,710
	Whittier	2.51	41,430
	Wilmington	6.36	7,019,886
	Yowlumne	11.22	91,734
	Zaca	10.45	122,519
US Federal OCS**	Beta	1.74	755,618
	Carpinteria	2.62	186,316
	Dos Cuadras	3.83	494,134
	Hondo	4.27	2,560,232
	Hueneme	4.33	53,782
	Pescado	3.45	1,161,239
	Point Arguello	8.68	603,479
	Point Pedernales	6.00	697,703
	Sacate	2.33	1,779,341
	Santa Clara	2.41	189,855
	Sockeye	5.82	491,992
Total			299,950,915

*All California fields that produced at least 10,000 bbls during 2012 or 2013
**Assumed volumes equal to 50 percent of 2013 volumes