

Heavy Crude Quality Project Simulated Distillation Summary (May/10)

Crude	Sample Date	Batch Count or No.	IBP	FBP	5% off	10% off	20% off	25% off	30% off	40% off	50% off	60% off	75% off	80% off	565+ Residue
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Crude Grade: Heavy Low Resid
OSH Suncor Synthetic H

2007 Q1	1	35	709	122	219	326	341	354	376	396	415	444	455
2007 Q3	2	35	683	129	241	322	337	349	370	390	411	443	457
2007 Q4	1	31	714	131	245	326	342	355	377	398	418	449	461
2008 Q2	1	37	684	142	258	327	343	355	378	399	419	450	463
2008 Q3	1	41	614	167	274	328	343	355	375	395	415	445	457
2008 Q4	1	37	701	129	262	321	337	350	373	395	416	446	458
2009 Q1	1	31	692	136	263	325	339	351	371	391	410	439	450
2009 Q2	1	34	679	118	216	315	332	347	370	391	413	446	460
2009 Q3	1	36	635	114	243	321	336	348	370	390	410	441	453
2009 Q4	1	36	617	124	244	314	329	342	364	383	403	432	446
2010 Q1	1	29	682	141	266	330	345	357	378	398	418	451	466
2010 Q2	1	36	653	133	255	329	345	357	380	401	421	452	465
5/17/2010	OSH-660	36	653	133	255	329	345	357	380	401	421	452	465
Average		35	673	132	248	323	339	351	373	394	414	445	457
Std Dev		3	32	13	16	5	5	4	4	5	5	5	5
Avg + StdDev		38	705	145	265	328	343	356	377	398	418	450	463
Avg - StdDev		32	640	119	232	318	334	347	369	389	409	439	452

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Crude	Sample Date	Batch Count or No.	IBP	FBP	5% off	10% off	20% off	25% off	30% off	40% off	50% off	60% off	75% off	80% off	565+ Residue
Crude Grade: Heavy Sour - Conventional															
BRN Bow River North															
	2006 Q1	2	35	715	120	198	273	302	328	380	430	481	577	614	26.2
	2007 Q1	3	44	715	86	154	249	279	307	359	412	480	609	649	30.0
	2007 Q2	1	34	713	68	158	263	296	327	387	444	506	623	664	35.0
	2007 Q3	2	35	717	92	188	281	314	344	402	456	517	636	677	33.5
	2007 Q4	1	33	718	58	156	256	290	319	374	425	477	576	614	26.2
	2008 Q1	1	35	716	98	182	280	314	346	407	464	530	649	692	35.4
	2008 Q2	1	65	718	132	191	278	306	327	388	442	501	615	658	31.1
	2008 Q3	1	35	713	101	191	277	309	339	396	450	510	629	670	32.6
	2008 Q4	1	33	720	84	162	259	293	322	379	433	491	606	648	29.6
	2009 Q1	1	34	712	76	139	250	287	319	381	435	493	605	647	29.6
	2009 Q2	1	33	718	64	130	229	262	293	351	410	468	577	619	26.3
	2009 Q3	1	34	718	86	150	249	286	316	372	423	474	588	636	27.1
	2009 Q4	1	35	714	99	152	254	290	321	381	435	492	608	654	29.6
	2010 Q1	1	34	711	73	139	240	274	306	368	428	491	614	657	30.2
	Average		38	716	90	166	261	293	322	379	433	493	608	649	30.1
	Std Dev		9	3	30	25	16	16	17	21	24	23	25	27	3.4
	Avg + StdDev		47	718	120	191	277	309	339	400	457	516	633	676	33.5
	Avg - StdDev		28	713	60	140	244	277	305	358	410	470	583	623	26.7

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Crude	Sample Date	Batch Count or No.	IBP	FBP	5% off	10% off	20% off	25% off	30% off	40% off	50% off	60% off	75% off	80% off	565+ Residue
Crude Grade: Heavy Sour - Conventional															
BRS Bow River South															
	2006 Q1	1	35	715	94	153	240	273	305	365	426	488	609	656	29.9
	2007 Q1	2	35	715	88	140	236	271	305	365	426	488	609	654	29.8
	2007 Q2	2	34	716	73	124	230	267	301	363	426	489	611	654	30.0
	2007 Q3	1	35	715	95	153	240	273	305	365	425	486	601	643	29.2
	2007 Q4	1	33	716	84	140	187	222	263	335	405	474	602	647	29.0
	2008 Q1	1	35	720	89	147	243	278	311	374	437	505	639	689	32.6
	2008 Q2	1	39	715	107	160	240	270	299	351	405	455	544	580	21.9
	2008 Q3	1	33	716	83	150	245	281	313	376	437	501	624	667	31.6
	2008 Q4	1	26	718	73	134	237	273	308	371	433	498	623	670	31.3
	2009 Q1	1	32	718	80	149	249	286	319	386	449	518	646	687	34.3
	2009 Q2	1	35	717	86	149	242	276	308	370	431	495	614	655	30.6
	2009 Q3	1	34	712	88	153	241	273	305	364	423	482	593	635	28.3
	2009 Q4	1	36	717	97	150	234	265	294	347	401	453	542	577	21.4
	2010 Q1	1	36	719	94	149	234	268	300	361	423	485	603	649	29.3
	Average		34	716	87	145	235	270	303	364	425	487	605	648	29.3
	Std Dev		2	2	9	10	14	14	12	12	12	16	27	30	3.3
	Avg + StdDev		36	718	96	155	249	283	314	375	437	503	632	678	32.6
	Avg - StdDev		32	714	78	134	221	256	291	352	413	471	578	618	26.1

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Crude	Sample Date	Batch Count or No.	IBP	FBP	5% off	10% off	20% off	25% off	30% off	40% off	50% off	60% off	75% off	80% off	565+ Residue
Crude Grade: Heavy Sour - Conventional															
F Fosterton															
	2006 Q1	2	37	713	120	177	254	285	313	368	423	477	573	612	26.1
	2007 Q1	2	35	716	99	164	252	288	320	385	448	513	639	681	33.4
	2007 Q2	2	37	716	82	145	231	268	300	360	420	479	590	632	27.9
	2007 Q3	1	38	719	129	184	267	301	331	391	448	510	634	681	32.8
	2007 Q4	1	39	711	129	182	265	299	328	387	443	503	617	656	31.3
	2008 Q1	1	37	712	119	181	265	299	330	392	453	516	639	684	33.7
	2008 Q2	1	43	716	136	189	266	299	327	385	441	499	610	652	30.6
	2008 Q3	1	36	712	132	189	269	302	333	393	450	511	627	672	32.7
	2008 Q4	1	26	713	114	171	256	290	320	381	440	501	620	669	31.3
	2009 Q1	1	32	715	114	173	254	288	319	381	440	503	625	668	31.9
	2009 Q2	1	35	716	128	180	262	294	323	382	439	498	609	647	30.4
	2009 Q3	1	37	718	128	179	259	293	323	383	441	502	620	662	31.5
	2009 Q4	1	38	713	129	180	261	293	322	378	429	489	600	641	29.1
	2010 Q1	1	35	714	114	174	259	292	323	385	445	508	625	668	32.2
	Average		36	715	116	174	256	290	320	380	438	499	613	656	30.7
	Std Dev		3	2	18	14	12	11	10	11	11	14	22	24	2.5
	Avg + StdDev		39	717	134	188	267	301	330	391	449	512	635	679	33.2
	Avg - StdDev		33	712	98	159	244	279	310	370	427	485	592	632	28.2

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Crude	Sample Date	Batch Count or No.	IBP	FBP	5% off	10% off	20% off	25% off	30% off	40% off	50% off	60% off	75% off	80% off	565+ Residue
Crude Grade: Heavy Sour - Conventional															
LLB Lloyd Blend															
	2006 Q1	2	34	717	70	144	257	291	320	377	430	486	582	617	27.4
	2007 Q1	2	34	715	40	85	231	278	315	383	447	514	634	671	33.2
	2007 Q2	1	34	716	69	131	266	306	341	410	475	550	664	701	41.1
	2007 Q3	2	33	715	54	133	272	310	345	413	476	551	666	702	38.1
	2007 Q4	1	37	716	45	111	252	296	332	405	473	552	671	708	38.2
	2008 Q1	1	35	715	78	150	275	313	349	418	483	560	678	715	39.2
	2008 Q2	1	60	720	125	160	268	304	325	394	459	533	662	706	36.2
	2008 Q3	1	35	716	75	171	284	319	354	420	483	557	673	709	38.9
	2008 Q4	1	32	714	56	120	262	301	335	403	465	536	651	686	36.2
	2009 Q1	1	29	717	42	101	242	288	324	396	463	538	663	703	36.6
	2009 Q2	1	33	714	50	106	254	296	331	401	466	541	661	699	37.0
	2009 Q3	1	35	716	76	144	274	312	347	414	478	552	666	703	38.3
	2009 Q4	1	35	715	56	110	253	294	329	398	462	535	647	687	36.1
	2010 Q1	1	26	717	66	138	266	305	341	410	476	553	679	717	38.5
	2010 Q2	1	34	715	70	150	270	307	341	406	468	541	661	702	36.8
	5/29/2010	LLB-833	34	715	70	150	270	307	341	406	468	541	661	702	36.8
	Average		35	716	63	129	260	300	334	401	464	536	652	690	36.1
	Std Dev		7	2	20	25	14	12	12	13	16	22	28	29	3.6
	Avg + StdDev		41	717	83	153	272	312	345	415	480	558	680	719	39.8
	Avg - StdDev		28	714	43	104	246	288	322	388	449	514	624	661	32.5

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Crude Grade: Heavy Sour - Conventional

LLK Lloyd Kerrobert

2006 Q1	2	34	719	77	166	265	298	327	383	436	491	588	625	28.2
2007 Q1	3	34	714	41	87	205	240	272	338	401	467	583	620	27.2
2007 Q2	3	35	717	71	137	270	307	341	406	468	538	658	697	37.5
2007 Q3	3	34	715	62	160	278	313	346	410	470	540	659	700	36.7
2007 Q4	3	32	717	53	139	270	306	338	401	460	525	635	672	33.3
2008 Q1	1	35	717	82	183	289	322	355	420	481	553	677	717	38.4
2008 Q2	1	33	714	47	156	284	319	353	419	481	554	668	706	38.3
2008 Q3	2	34	717	47	197	294	327	359	422	482	553	664	703	38.2
2009 Q1	1	32	717	52	140	270	307	340	406	467	536	652	690	36.1
2009 Q2	1	34	719	43	160	279	314	347	411	470	538	648	685	36.2
2009 Q3	1	33	717	65	181	286	319	351	415	474	542	656	695	36.9
2009 Q4	1	34	715	69	144	267	304	338	403	465	535	650	688	36.0
2010 Q1	1	33	717	57	106	251	290	323	389	451	517	634	672	33.6

Average		34	716	58	146	266	301	333	397	457	525	639	677	34.5
Std Dev		1	3	16	35	37	38	39	39	39	42	47	47	5.9
Avg + StdDev		35	719	75	181	304	339	372	437	497	567	686	725	40.4
Avg - StdDev		32	713	42	111	229	263	294	358	418	483	592	630	28.7

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Crude Grade: Heavy Sour - Conventional WCB Western Canadian Blend

2006 Q1	2	35	715	88	159	268	306	340	399	451	504	599	632	28.8
2007 Q1	2	34	716	59	113	233	279	316	383	446	512	630	667	32.9
2007 Q2	2	38	716	108	168	268	302	334	396	455	522	645	684	34.5
2007 Q3	1	35	718	81	171	274	307	335	386	436	493	624	671	30.6
2007 Q4	2	33	715	98	173	269	303	334	398	459	526	643	682	34.9
2008 Q2	1	34	716	98	174	272	306	338	403	464	533	649	686	35.9
2008 Q3	1	35	716	109	192	285	317	349	410	470	542	672	716	37.2
2008 Q4	2	30	717	78	158	262	297	328	392	453	519	639	677	34.0
2009 Q1	1	33	717	84	167	271	307	340	406	469	542	658	696	37.1
2009 Q2	1	36	716	88	172	268	302	332	395	454	518	632	665	33.7
2009 Q3	1	34	714	98	183	277	310	342	405	465	532	650	691	35.7
2009 Q4	1	36	716	96	172	269	303	335	399	460	527	641	674	35.0
2010 Q1	1	34	719	66	146	255	291	322	386	447	512	628	665	32.9
Average		34	716	88	162	265	301	333	396	455	520	637	675	33.8
Std Dev		3	2	19	26	15	11	9	8	9	15	24	27	3.2
Avg + StdDev		37	718	107	189	275	311	342	404	464	535	661	702	37.0
Avg - StdDev		32	714	69	136	250	290	324	388	446	505	613	648	30.6

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Crude Grade: Heavy Sour - Dilbit

AWB Access Western Blend

2008 Q3	4	35	716	53	87	262	324	367	441	515	602	686	703	43.9
2008 Q4	3	32	718	38	72	205	290	337	415	485	566	677	704	39.7
2009 Q1	1	35	716	42	69	176	282	332	411	481	566	689		39.7
2009 Q2	1	34	718	49	98	269	320	361	432	504	586	684	715	42.4
2009 Q3	1	34	718	44	84	253	312	354	428	500	583	683	712	41.9
2009 Q4	1	36	717	51	103	273	327	369	441	513	599	711		43.7
2010 Q1	1	35	716	49	79	210	286	333	412	484	568	686	716	40.1
2010 Q2	1	35	714	49	78	216	286	331	410	481	565	686		39.6
Average		34	717	47	82	235	306	351	426	498	582	686	709	41.7
Std Dev		2	1	9	14	41	23	20	17	20	22	14	10	2.6
Avg + StdDev		36	718	56	97	259	329	371	443	518	604	700	719	44.3
Avg - StdDev		32	715	37	68	195	283	331	409	479	560	672	699	39.1

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Crude Grade: Heavy Sour - Dilbit															
CL Cold Lake															
	2006 Q1	2	35	716	62	118	253	291	322	381	435	492	591	626	28.5
	2007 Q1	4	34	716	48	92	218	261	297	362	423	490	600	639	29.2
	2007 Q2	3	35	717	53	100	262	305	342	412	478	554	671	689	39.3
	2007 Q3	3	34	717	41	97	255	300	337	408	474	549	664	699	37.8
	2007 Q4	3	35	714	50	107	270	315	354	428	498	579	693	707	41.5
	2008 Q1	2	35	718	74	134	280	321	358	430	500	581	700		41.8
	2008 Q2	2	46	718	85	131	269	310	342	415	483	562	683	714	39.5
	2008 Q3	3	35	716	58	135	279	320	356	426	492	569	679	709	40.3
	2008 Q4	1	33	715	49	100	246	292	330	401	465	537	648	682	36.2
	2009 Q1	2	32	716	44	94	247	295	334	408	476	554	669	705	38.4
	2009 Q2	2	33	717	41	79	245	294	333	406	473	549	665	701	37.8
	2009 Q3	2	35	717	56	99	267	311	349	420	487	565	680	714	39.7
	2009 Q4	3	36	717	65	140	283	322	357	424	491	567	676	704	40.0
	2010 Q1	2	31	716	44	90	249	299	339	414	484	566	686	715	39.8
	2010 Q2	2	35	719	60	112	260	305	344	417	485	564	682	716	39.6
	5/25/2010	CL(E)-749	35	720	64	130	272	314	351	422	489	566	681	714	40.0
	Average		35	717	55	109	258	302	339	409	475	550	664	689	37.8
	Std Dev		4	2	14	23	24	24	25	27	31	37	42	43	5.3
	Avg + StdDev		39	719	69	132	282	326	363	436	506	587	706	732	43.1
	Avg - StdDev		30	715	41	86	234	278	314	382	444	514	622	646	32.5

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Crude Grade: Heavy Sour - Dilbit															
PH Peace River Heavy															
	2006 Q1	1	35	717	72	134	257	299	334	404	471	547	663	698	37.7
	2007 Q1	1	34	717	41	90	206	254	294	357	434	528	646	677	35.5
	2007 Q2	2	36	714	55	119	243	286	324	397	472	556	675	695	38.9
	2007 Q4	1	31	716	38	99	241	285	323	398	472	558	675	710	38.9
	2008 Q2	1	34	718	47	99	231	279	319	395	466	543	656	692	37.2
	2008 Q4	1	34	715	54	105	224	268	306	376	450	529	651	688	35.7
	2009 Q1	1	29	717	36	79	213	267	313	396	473	558	670	704	38.9
	2009 Q3	1	36	716	68	101	241	282	318	385	458	540	658	695	36.9
	2010 Q1	1	27	718	42	99	250	300	342	423	502	589	704		42.6
	Average		33	716	51	104	235	281	320	393	467	550	667	695	38.1
	Std Dev		3	2	12	15	16	15	15	20	20	20	18	9	2.3
	Avg + StdDev		36	718	62	120	250	296	335	412	487	571	685	704	40.4
	Avg - StdDev		30	715	39	89	219	265	305	373	447	530	649	685	35.8

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Crude Grade: Heavy Sour - Dilbit															
SH Seal Heavy															
	2006 Q1	5	34	718	78	130	233	275	314	390	462	540	658	691	37.0
	2007 Q1	3	34	716	53	101	206	253	294	371	445	521	641	675	34.6
	2007 Q2	2	37	718	63	126	236	281	322	402	478	564	681	705	41.3
	2007 Q3	2	34	718	68	126	235	277	316	392	466	549	670	705	38.1
	2007 Q4	2	30	717	59	120	238	282	323	403	478	563	675	707	39.5
	2008 Q1	1	35	715	64	118	243	288	329	408	482	569	693		40.3
	2008 Q2	1	35	716	81	142	259	304	346	427	506	595	710		43.4
	2008 Q3	1	33	719	68	130	250	293	333	412	486	569	684	719	40.3
	2008 Q4	1	35	719	78	126	245	290	330	410	484	568	686	719	40.3
	2009 Q1	1	34	717	52	99	214	263	306	387	462	544	665	703	37.6
	2009 Q2	1	33	719	40	86	202	250	291	367	440	513	634	666	33.7
	2009 Q3	1	30	717	52	102	241	286	328	410	487	575	687	717	41.0
	2009 Q4	1	36	720	85	138	256	300	341	421	497	583	700		42.0
	2010 Q1	1	35	714	56	88	197	249	293	373	451	536	664	700	36.8
	2010 Q2	1	35	717	61	98	224	273	318	404	484	571	684	717	40.4
	Average		34	717	65	117	230	275	316	395	470	552	670	698	38.4
	Std Dev		2	2	13	17	17	16	15	17	18	23	22	19	2.8
	Avg + StdDev		36	719	78	134	246	291	332	412	488	575	692	717	41.3
	Avg - StdDev		32	716	52	101	213	260	301	378	451	528	648	678	35.6

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Crude	Sample Date	Batch Count or No.	IBP	FBP	5% off	10% off	20% off	25% off	30% off	40% off	50% off	60% off	75% off	80% off	565+ Residue
Crude Grade: Heavy Sour - Dilbit															
SC Smiley-Coleville															
	2006 Q1	2	35	717	80	162	252	284	314	370	424	477	571	606	25.7
	2007 Q1	1	34	719	59	121	256	295	329	394	454	519	635	672	33.7
	2007 Q2	1	35	717	77	149	265	303	336	402	463	530	647	686	38.5
	2007 Q3	2	35	719	86	168	272	308	339	402	459	522	632	666	33.9
	2007 Q4	1	30	716	61	136	257	295	329	395	457	524	640	678	34.5
	2008 Q1	1	35	712	75	160	272	309	343	409	471	542	662	704	37.0
	2008 Q2	1	35	715	99	187	285	319	352	416	476	546	666	707	37.5
	2008 Q4	2	34	717	81	157	270	307	340	406	466	533	649	688	35.8
	2009 Q1	1	29	718	56	128	250	289	323	389	450	515	632	671	33.2
	2009 Q2	1	33	716	69	139	262	300	334	401	463	533	653	693	35.9
	2009 Q3	1	36	719	98	176	274	310	343	407	466	533	646	684	35.7
	2009 Q4	1	35	720	69	153	264	301	334	399	458	525	640	672	34.6
	2010 Q1	1	27	718	86	162	265	302	336	402	463	532	654	696	35.8
	2010 Q2	1	35	717	88	172	272	308	340	405	465	532	648	688	35.5
	5/23/2010	SC-296	35	717	88	172	272	308	340	405	465	532	648	688	35.5
	Average		33	717	78	156	265	302	334	398	458	523	637	675	34.3
	Std Dev		2	2	12	17	10	10	10	13	14	19	27	29	3.6
	Avg + StdDev		36	719	90	173	275	311	345	411	472	542	664	704	37.9
	Avg - StdDev		31	715	66	139	256	292	324	386	443	504	610	646	30.7

Heavy Crude Quality Project Simulated Distillation Summary (May/10)

Crude	Sample Date	Batch Count or No.	IBP	FBP	5% off	10% off	20% off	25% off	30% off	40% off	50% off	60% off	75% off	80% off	565+ Residue
Crude Grade: Heavy Sour - Dilbit															
WH Wabasca Heavy															
	2006 Q1	3	34	717	90	157	247	282	314	378	439	502	611	646	31.0
	2007 Q1	1	35	718	60	125	237	277	315	389	459	536	655	695	36.4
	2007 Q2	2	39	712	114	169	256	289	319	380	443	512	632	676	33.1
	2007 Q3	1	35	720	74	146	250	289	324	396	463	538	663	704	36.8
	2007 Q4	2	33	718	99	160	261	301	337	410	478	555	670	683	38.6
	2008 Q1	1	35	718	94	157	258	296	331	403	471	549	678	718	38.1
	2008 Q2	1	33	720	87	153	254	292	327	397	463	536	652	691	36.3
	2008 Q3	1	33	718	99	165	260	296	330	398	463	533	647	687	35.9
	2008 Q4	1	26	719	66	124	240	281	318	391	461	537	657	697	36.5
	2009 Q1	1	34	712	74	133	240	279	316	387	454	527	650	690	35.3
	2009 Q2	1	33	719	62	134	240	278	313	381	448	518	637	672	34.1
	2009 Q3	1	30	718	54	134	245	284	320	394	464	542	660	698	37.2
	2009 Q4	1	35	718	104	176	268	305	340	409	475	549	671	711	38.1
	2010 Q1	1	35	719	68	129	246	287	324	399	470	550	670	704	38.1
	2010 Q2	1	35	720	75	139	247	286	320	391	459	533	650	692	35.9
	Average		34	717	85	150	251	288	323	392	459	531	649	685	35.5
	Std Dev		3	3	18	17	10	10	11	14	17	23	26	25	3.3
	Avg + StdDev		37	720	103	166	261	298	333	406	476	554	675	710	38.9
	Avg - StdDev		31	715	66	133	240	278	312	378	441	508	622	661	32.2

Heavy Crude Quality Project Simulated Distillation Summary (May/10)

Crude	Sample Date	Batch Count or No.	IBP	FBP	5% off	10% off	20% off	25% off	30% off	40% off	50% off	60% off	75% off	80% off	565+ Residue
Crude Grade: Heavy Sour - Dilbit															
WCS Western Canadian Select															
	2006 Q1	5	34	718	83	172	267	299	327	384	438	496	603	641	29.7
	2007 Q1	3	34	716	41	92	217	260	295	356	417	481	594	632	27.8
	2007 Q2	3	35	718	63	150	276	313	346	412	475	550	667	696	39.0
	2007 Q3	3	34	717	57	151	274	311	343	406	467	539	661	699	36.6
	2007 Q4	3	33	716	55	140	268	308	342	408	471	541	652	667	36.4
	2008 Q1	2	35	714	78	158	276	313	347	413	477	554	678	715	38.5
	2008 Q2	1	34	719	102	182	278	310	339	397	452	511	623	658	32.5
	2008 Q3	2	34	718	85	173	281	316	349	412	471	541	659	697	36.8
	2008 Q4	1	35	720	69	126	263	302	335	401	462	533	657	698	36.0
	2009 Q1	1	34	713	50	101	247	290	325	393	456	526	650	691	35.1
	2009 Q2	1	33	719	38	87	231	276	312	377	439	506	628	663	32.3
	2009 Q3	1	30	718	54	162	277	313	348	417	485	568	690		40.0
	2009 Q4	1	35	714	47	115	258	298	333	400	462	531	648	686	35.4
	2010 Q1	1	35	715	48	80	245	296	336	411	481	562	676	708	39.4
	2010 Q2	1	35	717	68	133	261	299	331	396	459	534	654	695	36.0
	Average		34	717	64	142	263	300	333	397	457	526	643	673	34.7
	Std Dev		1	2	18	33	24	22	21	23	26	32	39	38	5.0
	Avg + StdDev		35	719	83	174	284	322	355	420	483	559	682	711	39.7
	Avg - StdDev		33	714	46	109	238	278	312	373	432	494	604	636	29.7

Heavy Crude Quality Project Simulated Distillation Summary (May/10)

Crude	Sample Date	Batch Count or No.	IBP	FBP	5% off	10% off	20% off	25% off	30% off	40% off	50% off	60% off	75% off	80% off	565+ Residue
Crude Grade: Heavy Sour - Dilsynbit															
AHS Albian Heavy Synthetic															
	2006 Q1	3	35	716	92	171	273	308	339	394	441	489	576	611	26.6
	2007 Q1	3	32	693	84	158	270	311	344	393	430	467	529	554	18.6
	2007 Q2	1	34	716	72	118	266	326	371	427	471	516	602	638	34.1
	2007 Q3	2	34	714	71	128	267	320	363	424	471	518	606	643	31.6
	2007 Q4	1	37	708	58	115	260	318	362	421	468	517	614	654	31.9
	2008 Q1	1	35	713	109	180	291	328	360	413	462	521	636	684	33.5
	2008 Q2	1	56	715	122	140	284	323	362	411	450	488	560	590	24.0
	2008 Q3	1	35	710	83	139	303	354	387	433	475	518	601	637	31.0
	2008 Q4	1	33	716	83	141	261	307	345	401	445	492	582	618	27.3
	2009 Q1	1	29	716	51	104	245	318	371	429	470	509	582	612	28.5
	2009 Q2	1	33	717	59	104	280	342	384	438	483	527	608	641	32.9
	2009 Q3	1	35	711	68	98	247	320	372	432	478	522	604	639	31.9
	2009 Q4	1	35	713	67	120	299	351	385	430	473	515	594	628	30.1
	2010 Q1	1	33	714	52	98	269	340	383	436	479	524	613	652	32.6
	2010 Q2	1	35	715	68	138	282	322	358	417	465	517	615	653	32.2
	5/15/2010	AHS-635	35	715	68	138	282	322	358	417	465	517	615	653	32.2
	Average		35	711	78	137	272	322	361	415	459	504	587	621	28.4
	Std Dev		5	13	25	39	20	17	18	20	23	28	41	48	7.1
	Avg + StdDev		40	724	103	176	289	339	379	435	482	532	628	669	35.6
	Avg - StdDev		30	697	53	98	252	305	342	395	435	475	546	574	21.3

Heavy Crude Quality Project Simulated Distillation Summary (May/10)

Crude	Sample Date	Batch Count or No.	IBP	FBP	5% off	10% off	20% off	25% off	30% off	40% off	50% off	60% off	75% off	80% off	565+ Residue
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Crude Grade: Heavy Sour - Synbit

PSH Long Lake Heavy

2008 Q2	1	36	715	139	208	284	310	334	380	427	481	631	686	30.0	
2008 Q3	4	36	716	137	203	280	308	333	380	425	476	611	667	28.6	
2008 Q4	2	31	716	112	179	260	289	313	357	399	441	536	596	21.6	
2009 Q1	1	33	720	106	164	241	271	297	344	388	434	544	615	22.7	
2009 Q2	1	36	719	99	149	247	280	308	358	409	461	601	653		
2009 Q3	1	34	711	99	175	257	286	311	359	408	460	592	645	26.8	
2009 Q4	1	38	718	128	184	264	294	320	368	415	464	594	645	27.0	
2010 Q1	1	36	720	69	133	215	250	282	340	399	459	593	645	27.3	
Average			35	716	118	182	262	292	317	365	412	462	589	646	26.5
Std Dev			3	3	22	23	20	18	16	14	13	16	32	29	3.0
Avg + StdDev			38	720	139	205	280	310	334	379	425	478	621	675	29.5
Avg - StdDev			32	713	96	159	242	274	301	351	399	446	557	617	23.5

Heavy Crude Quality Project Simulated Distillation Summary (May/10)

Crude	Sample Date	Batch Count or No.	IBP	FBP	5% off	10% off	20% off	25% off	30% off	40% off	50% off	60% off	75% off	80% off	565+ Residue
Crude Grade: Heavy Sour - Synbit															
SHB Surmont Heavy Blend															
	2009 Q1	2	34	714	120	189	266	294	318	364	410	459	585	640	26.1
	2009 Q2	1	36	717	133	197	272	299	321	365	411	461	590	644	
	2009 Q3	1	35	719	136	195	265	291	315	361	411	464	592	641	27.1
	2009 Q4	1	37	720	139	198	262	286	308	352	401	455	588	642	26.7
	2010 Q1	1	36	715	127	192	255	279	301	342	388	439	556	610	23.8
	Average		35	716	129	193	264	290	313	358	405	456	583	636	25.9
	Std Dev		1	3	14	8	5	6	7	8	9	8	12	12	1.2
	Avg + StdDev		36	719	143	201	270	297	320	366	414	464	595	648	27.1
	Avg - StdDev		34	714	115	186	259	284	306	350	397	448	570	625	24.8

Heavy Crude Quality Project Simulated Distillation Summary (May/10)

Crude	Sample Date	Batch Count or No.	IBP	FBP	5% off	10% off	20% off	25% off	30% off	40% off	50% off	60% off	75% off	80% off	565+ Residue
Crude Grade: Light Sour															
LSB Light Sour Blend															
	2007 Q1	3	34	713	49	92	171	204	235	293	348	404	497	530	16.3
	2007 Q2	3	35	704	65	99	158	186	214	268	322	379	476	517	16.0
	2007 Q3	3	34	709	58	92	146	173	201	255	309	364	459	496	12.9
	2007 Q4	3	31	705	50	91	149	177	208	263	317	375	472	511	14.7
	2008 Q1	1	34	701	70	99	149	176	205	259	312	369	465	504	13.9
	2008 Q2	1	35	716	70	100	159	187	216	268	321	380	476	517	15.5
	2008 Q3	2	34	701	75	100	146	171	197	247	297	351	444	481	11.5
	2009 Q1	1	29	718	49	87	132	157	182	233	282	334	426	462	9.7
	2009 Q3	1	35	713	67	85	115	142	169	221	271	323	412	446	7.1
	2009 Q4	1	34	697	54	80	126	152	175	225	274	325	417	453	8.8
	2010 Q1	1	33	694	46	81	132	158	179	227	279	334	431	470	11.6
	2010 Q2	1	35	711	72	100	149	170	189	235	285	338	431	468	10.7
	5/24/2010	LSB-798	35	711	72	100	149	170	189	235	285	338	431	468	10.7
	Average		33	707	59	93	149	176	204	257	310	365	460	497	13.3
	Std Dev		2	8	11	8	23	26	28	31	34	37	41	43	5.0
	Avg + StdDev		35	715	70	101	175	202	232	288	344	402	501	540	18.3
	Avg - StdDev		32	699	48	85	126	151	176	226	276	329	418	454	8.4

Heavy Crude Quality Project Simulated Distillation Summary (May/10)

Crude	Sample Date	Batch Count or No.	IBP	FBP	5% off	10% off	20% off	25% off	30% off	40% off	50% off	60% off	75% off	80% off	565+ Residue
Crude Grade: Light Sour															
SLE SLE															
	2007 Q1	2	34	709	44	76	124	151	178	236	293	351	450	489	12.1
	2007 Q2	3	35	709	57	99	142	167	196	256	313	371	472	515	16.3
	2007 Q3	2	35	705	55	88	148	179	210	270	326	387	488	532	16.7
	2007 Q4	2	32	711	48	83	129	154	179	237	294	351	451	492	12.9
	2008 Q1	1	34	684	68	97	136	160	183	235	287	342	440	480	12.2
	2008 Q2	1	34	696	80	101	140	161	182	231	279	329	419	453	8.0
	2008 Q3	2	34	700	55	88	133	157	182	238	292	348	448	488	12.6
	2008 Q4	2	29	707	45	78	123	147	171	226	280	337	433	470	10.4
	2009 Q1	1	34	699	57	87	128	154	177	234	290	347	446	485	12.0
	2009 Q2	1	34	702	41	92	123	141	166	220	273	329	425	462	9.7
	2009 Q3	1	33	715	50	82	127	151	174	231	286	341	435	471	10.6
	2009 Q4	1	35	711	40	82	117	139	165	230	293	354	459	502	14.3
	2010 Q1	1	34	701	61	88	136	160	187	243	298	354	449	486	11.7
	2010 Q2	1	35	718	61	82	130	156	181	239	295	352	450	488	12.0
	Average		34	706	53	87	132	157	183	240	296	353	451	491	12.8
	Std Dev		2	8	11	10	10	12	14	15	16	18	20	23	2.7
	Avg + StdDev		36	714	64	97	144	169	196	255	311	371	472	514	15.5
	Avg - StdDev		31	698	43	78	122	145	169	225	280	335	431	468	10.1

Heavy Crude Quality Project Simulated Distillation Summary (May/10)

Crude	Sample Date	Batch Count or No.	IBP	FBP	5% off	10% off	20% off	25% off	30% off	40% off	50% off	60% off	75% off	80% off	565+ Residue
Crude Grade: Medium Sour															
MS Midale															
	2006 Q1	2	35	711	83	114	179	210	239	296	351	409	502	543	17.3
	2007 Q1	3	32	711	66	93	166	200	231	288	344	402	502	547	17.2
	2007 Q2	3	35	690	77	98	161	194	226	287	347	409	511	556	19.7
	2007 Q3	3	33	712	59	95	164	200	234	296	356	419	523	572	20.4
	2007 Q4	3	31	713	77	109	171	200	231	291	350	413	516	564	19.7
	2008 Q1	1	35	716	82	111	181	217	249	308	369	432	540	591	22.3
	2008 Q2	1	35	710	80	114	190	224	256	316	379	442	556	610	23.9
	2008 Q3	1	33	711	69	107	178	213	243	300	357	418	514	558	19.1
	2009 Q1	1	32	710	69	107	173	201	235	295	355	417	521	570	20.3
	2009 Q2	1	34	714	71	106	165	191	221	283	344	408	513	562	19.6
	2009 Q4	1	35	710	73	107	166	191	219	278	337	400	503	548	18.3
	2010 Q1	1	35	717	70	106	166	194	223	284	343	407	509	556	19.0
	Average		33	709	72	103	170	202	233	292	351	413	515	562	19.4
	Std Dev		2	13	13	15	14	15	15	17	19	21	28	33	3.3
	Avg + StdDev		36	722	85	118	185	216	248	309	370	434	542	595	22.8
	Avg - StdDev		31	696	59	88	156	187	217	276	332	392	487	529	16.1

Heavy Crude Quality Project Simulated Distillation Summary (May/10)

Crude	Sample Date	Batch Count or No.	IBP	FBP	5% off	10% off	20% off	25% off	30% off	40% off	50% off	60% off	75% off	80% off	565+ Residue
Crude Grade: Medium Sour															
SO Mixed Sour Blend															
	2007 Q1	2	34	715	43	85	160	202	239	302	362	424	527	574	20.5
	2007 Q2	3	36	717	47	101	187	232	269	335	401	464	584	635	27.7
	2007 Q3	3	34	712	53	98	187	227	262	325	387	448	559	609	24.1
	2007 Q4	3	33	718	49	102	186	228	264	326	387	447	554	599	23.0
	2008 Q1	1	34	709	84	129	215	249	279	335	394	453	566	615	24.8
	2008 Q2	2	47	713	97	131	200	237	268	325	381	444	561	613	24.3
	2008 Q3	2	33	712	58	105	183	222	255	315	374	434	538	586	21.8
	2008 Q4	1	26	711	58	99	166	205	240	301	358	419	520	566	19.7
	2009 Q1	1	29	714	34	88	156	192	228	290	347	408	505	548	18.0
	2009 Q2	1	33	714	50	85	151	189	228	297	360	423	536	590	21.8
	2009 Q3	1	34	720	41	70	109	151	197	279	349	418	526	574	20.4
	2009 Q4	1	34	718	46	84	170	212	246	307	367	426	532	578	21.0
	2010 Q2	1	34	711	78	126	214	253	289	350	394	438	530	578	20.3
	5/25/2010 SO-707		34	711	78	126	214	253	289	350	394	438	530	578	20.3
	Average		35	714	56	101	179	220	255	318	379	439	548	596	22.9
	Std Dev		6	4	19	20	28	26	23	20	20	20	29	32	3.5
	Avg + StdDev		41	718	75	121	206	246	279	338	399	459	577	629	26.3
	Avg - StdDev		28	711	37	81	151	193	232	298	358	419	519	564	19.4

Heavy Crude Quality Project Simulated Distillation Summary (May/10)

Crude	Sample Date	Batch Count or No.	IBP	FBP	5% off	10% off	20% off	25% off	30% off	40% off	50% off	60% off	75% off	80% off	565+ Residue
Crude Grade: Medium Sour															
SHE SHE															
	2006 Q1	2	35	709	77	105	161	187	214	266	316	372	466	504	13.2
	2007 Q1	2	34	713	55	89	138	166	197	259	319	383	491	536	17.1
	2007 Q2	3	35	711	75	98	146	176	208	270	330	393	502	551	19.3
	2007 Q3	2	33	710	72	105	167	199	230	288	345	407	515	566	19.8
	2007 Q4	1	37	714	48	90	141	174	209	271	333	399	509	561	19.3
	2008 Q1	1	35	710	86	109	171	204	237	302	363	431	563	625	24.5
	2008 Q2	1	56	718	108	124	143	160	184	241	297	340	441	481	11.3
	2008 Q3	1	36	708	84	103	160	191	222	281	337	398	500	544	17.7
	2008 Q4	1	26	715	49	81	126	151	176	237	300	360	467	511	15.0
	2009 Q1	1	34	705	59	88	131	156	182	239	297	354	453	494	12.9
	2009 Q2	1	33	718	38	67	110	133	161	219	274	332	422	458	9.0
	2009 Q3	1	33	713	41	68	107	129	156	220	291	359	470	519	15.9
	2009 Q4	1	35	714	39	56	105	129	160	245	320	398	531	596	21.9
	2010 Q1	1	35	719	41	68	125	160	208	292	363	436	574	633	25.4
	2010 Q2	1	35	713	51	72	105	128	157	236	315	394	521	580	20.6
	Average		35	712	64	91	140	167	198	261	322	385	495	543	17.6
	Std Dev		5	4	20	18	22	25	26	25	24	27	38	45	4.3
	Avg + StdDev		40	716	84	109	165	192	224	285	346	413	533	588	21.9
	Avg - StdDev		30	708	44	73	117	142	172	236	298	358	457	498	13.2