

MINISTRY OF NATURAL RESOURCES ومزارمتی سامانه سروشتیهکان

KURDISTAN REGIONAL GOVERNMENT حکومه تی هه ريّمی کوردستان

## OIL PRODUCTION, EXPORT, AND CONSUMPTION REPORT 2015 (Including Export Revenues)

This report provides a summary of crude oil production, refining, local consumption and export in the Kurdistan Region of Iraq in 2015. It also contains information on the Region's pipeline infrastructure, the status of exploration blocks, and the composition of the workforce in the Region's oil and gas sector.

Since June 24, the Kurdistan Regional Government (KRG) has resumed its policy of direct oil sales via the Turkish port of Ceyhan to compensate the Kurdistan Region for the significant revenue shortfalls due to budgetary non - compliance by the Iraqi federal government. Export of crude oil has risen throughout the year as upgrades to the pipeline network increased export capacity. In 2015, the KRG continued its cooperation with the North Oil Company in Kirkuk to facilitate the flow of oil from the previously stranded Kirkuk field, in line with the provisions of the 2015 federal budget.



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#### **KEY EVENTS 2015**

Export Agreement between the Kurdistan Regional Government and the Federal Government is enshrined in the 2015 Iraq budget. KRG to transfer to SOMO at port of Ceyhan 550,000 bpd as an annual average. Federal government to provide KRG with full 17% of its budgetary entitlement, agreed to be around US\$1 billion per month, plus a sum of money for the Peshmerga.

KRG receives much less than expected 17% of overall federal budget figure from Baghdad, which is unable to pay, so after several unsuccessful attempts to persuade Baghdad to pay, the KRG decides on a policy of direct oil sales to make up for shortfall. It asks Kurdistan Region's political leadership to support the policy.

Due to shortfalls caused by the Iraqi federal government in sending less than 40% of the KRG's budget entitlement, the KRG finally, by mid - June, gains political support from the political leadership of the coalition parties to restart independent direct oil sales. It signs pre-payment deals with a number of international oil trading houses to generate revenues to pay government salaries, fight terrorism and support 1.8 million refugees and IDPs.

Despite economic crisis affecting the Region, the KRG authorizes the first tranche of regular monthly payments to the exporting IOCs, enabling them to cover costs and maintain production, and at the same time continues to generate just enough additional revenues to meet the monthly payroll of the KRG.

KRG issues calls for expression of interest for building up to three new refineries in the Kurdistan Region.



#### **GROSS PRODUCTION 2015 Monthly Outputs**



May June July August September October November December Total

Month

lanuarv

March

April

in Barrels.

February

Average Monthly Month **Production (in BPD)** 442,924 January 488,445 February 486,672 March April 601,108 May 630,153 673,741 June July 619,237 573,989 August 614,365 September October 594,126 November 587,107 612.367 December Total 577,287

Table 2: Monthly average barrels per day.

Block	Annual Production
DIOCK	(bbls)
Khalakan	32,026
Akre Bijel	355,908
Sarsang	1,020,770
Hawler	921,824
Garmian	1,678,454
Shaikhan	11,134,567
Taq Taq	42,378,998
Tawke	49,337,899
Khurmala	103,849,143
Total	210,709,588

Table 3: 2015 Production Output per Block.







#### **EXPORTS 2015** Via KRG - Turkey Pipeline

Exports via KRG Pipeline per	month (bbls)		Exports via KRG Pipe	eline per day (bbls)		
						Daily
Month	KRG Exports	NOC Contribution	Total	Daily KRG Exports	Daily NOC Contribution	Average
January	7,914,548	-	7,914,548	255,308	-	255,30
February	7,723,213	-	7,723,213	275,829	-	275,82
March	8,187,697	-	8,187,697	264,119	-	264,11
April	12,457,371	4,421,614	16,878,985	415,246	147,387	562,63
May	12,620,452	5,285,790	17,906,242	407,111	170,509	577,62
June (1st to 23rd of June)	10,051,460	3,499,941	13,551,401	335,049	116,665	451,71
Total Exports during agreem	ent with the Fed	leral Government:	72,162,087			
June (24th to 30th of June)	2,689,252	889,987	3,579,239	89,642	29,666	119,30
July	12,020,683	3,998,407	16,019,090	387,764	128,981	516,74
August	10,958,817	3,698,981	14,657,798	353,510	119,322	472,833
September	13,898,548	4,715,794	18,614,342	463,285	157,193	620,473
October	13,611,252	4,850,105	18,461,357	439,073	156,455	595,52
November	13,023,266	4,999,809	18,023,075	434,109	166,660	600,76
December	13,504,536	4,601,198	18,105,734	435,630	148,426	584,05
Exports for Direct Oil Sales	79,706,354_	27,754,281_	_ 107,460,635_	371,859	129,529_	501,38
Grand Total Exports	138,661,096	40,961,626	179,622,722	350,437	103,174	421,21

Table 4: Monthly and Daily Exports via KRG Pipeline of KRG operated fields and NOC (North Oil Company operated fields. Note: Direct Oil Sales by the Kurdistan Regional Government initiated on the 24th of June 2015.



Chart 1: Exports via KRG Pipeline of KRG operated fields and fields operated by the North Oil Company (NOC) in bbls.

#### KRG Revenues 2015

Average Income received per Barrel	\$3,949,697,777.89	107,460,635.00	\$36.75
	Total Direct Export Sales (in USD)	Total Exports (in bbl)	Average Income received per Barrel (in USD)
% increase from 23rd June			181%
Average Revenue /Month	\$423,705,262.19	\$347,299,395.24	\$628,987,647.88
Effective Months	5.72	5.72	6.28
Number of Days	174	174	191
Total	IQD 2,423,826,267.00	\$1,986,742,841.80	\$3,949,697,777.89
November-December			650,000,000
October-November		-	127,000,000
September-October	-	-	721,030,778
August-September	-	-	550,000,000
July-August	-	-	585,000,000
june-July	-	-	440,000,000
June	166,771,000	136,697,541	876,667,000
May	508,815,000	417,061,475	-
April	480,066,000	393,496,721	-
March	527,432,000	432,321,311	-
February	490,742,267	402,247,760	-
January	250,000,000	204,918,033	-
Month	Paid by Federal Government (000 IQD)	Paid by Federal Government (USD)	Achieved through Direct Export Sales (USD)



Chart 2: Average Monthly Budget from the Federal Government and Average Monthly Revenues from KRG Direct Oil Sales (in USD)



#### EXPORTS 2015 Via Trucking

Month	Exports via Trucking (bbls)	Daily Exports via Trucking (bbls)	Month	Exports via Trucking (bbls)	Daily Exports via Trucking (bbls)
January	839,279	27,074	July	125,847	4,060
February	32,326	1,154	August	78,586	2,535
March	585,104	18,874	September	56,659	1,889
April	1,151,521	38,384	October	49,439	1,595
May	928,211	29,942	November	38,878	1,296
June	636,905	21,230	December	16,332	527
Sub total	4,173,347	136,659	Sub total	365,741	11,901
Monthly T	otal (bbls) 4,5	39,088			

Daily Average (bbls) 12,435.86

Table 5: Monthly Exports via Trucking from the Shaikhan and Hawler blocks.



Chart 3: Exports via Trucking from the Shaikhan and Hawler blocks (bbls).

+ CRUDE OIL

#### LOCAL CONSUMPTION INCLUDING SWAPS 2015 Domestic Sales



Table 6: Barrels of Oil sold to buyers in the Domestic Market.

#### OPERATIONAL USE 2015 Field Usage by Operators



Table 7: Usage of Crude Oil (in bbls) for field operations

Chart 5: Operational Use by Operators (in bbls).



#### SUPPLIED TO MAIN REFINERIES 2015

		Monthly Su	oply		Daily	Supply		
Month	Supply to Tawke (bbls)	Supply to Bazian (bbls)	Supply to Kalak (bbls)	Total Supply (bbls)	Daily Supply to Tawke (bbls)	Daily Supply to Bazian (bbls)	Daily Supply to Kalak (bbls)	Average Daily Supply (bbls)
January	161,531	1,002,302	2,240,288	3,404,121	5,211	32,332	72,267	109,810
February	140,776	915,640	2,040,302	3,096,718	5,028	32,701	72,868	110,597
March	166,913	906,315	2,181,237	3,254,465	5,384	29,236	70,362	104,983
April	167,202	888,368	2,256,674	3,312,244	5,573	29,612	75,222	110,408
May	108,262	998,915	2,097,360	3,204,537	3,492	32,223	67,657	103,372
June	48,663	979,058	2,404,652	3,432,373	1,622	32,635	80,155	114,412
July	104,999	905,640	2,435,959	3,446,598	3,387	29,214	78,579	111,181
August	143,721	966,626	2,110,664	3,221,012	4,636	31,181	68,086	103,904
September	112,966	806,533	1,321,268	2,240,767	3,766	26,884	44,042	74,692
October	128,685	1,026,602	1,367,059	2,522,346	4,151	33,116	44,099	81,366
November	124,798	978,570	1,676,073	2,779,441	4,160	32,619	55,869	92,648
December	84,035	939,251	1,727,166	2,750,452	2,711	30,298	55,715	88,724
Total	1,492,552	11,313,819	23,858,702	36,665,073	4,093	31,005	65,410	100,508

Table 8: Monthly Crude Oil supply to Main Refineries



Chart 6: Monthly supply to Main Refineries

#### **REFINED PRODUCTS 2015** Refining Outputs by Refineries

January 23,663 - - 37,803 99,757   February 20,350 - - - 29,995 90,123   March 21,796 - - - 38,673 106,184   April 22,372 - - - 36,929 107,685	- 4 -	-	161,224 140,467
March 21,796 38,673 106,184	4 -		140,467
		-	
April 22.372 36.929 107.685	5		166,653
	- د	-	166,985
May 16,504 24,240 67,321	-	-	108,065
Ine 11,417 16,024 21,049	-	-	48,490
July 18,773 25,716 60,248	- 3	-	104,737
August 23,210 35,211 84,952	2 -	-	143,372
September 10,147 29,955 72,521	-	-	112,623
October 1,275 36,694 90,335	; -	-	128,304
November 2,250 36,254 85,922	-	-	124,426
December 2,270 34,561 46,833	-	-	83,663
Total 130,014 314,256 743,049	9 -	-	1,489,010

	Month	Naphtha (bbls)	Sweet Nap. (bbls)	Gasoline (bbls)	Kerosene (bbls)	Diesel (bbls)	Fuel Oil (bbls)	LPG (bbls)	Jet Fuel (bbls)	Total Products (bbls)
	January	252,412	-	189,288	101,745	101,758	336,570	6,833	-	988,605
	February	280,941	-	105,711	91,648	89,353	289,751	5,924	-	863,328
	March	189,034	4,900	188,883	87,793	93,031	272,650	10,266	-	846,558
BAZIAN REFINERY	April	326,378	2,445	82,999	90,451	118,284	280,443	3,526	-	904,526
	May	243,009	5,437	180,362	97,476	123,516	316,891	14,173	-	980,864
	June	264,147	4,055	148,685	93,229	117,281	301,821	10,357	-	939,574
	July	181,490	-	168,890	87,486	103,355	272,196	10,336	-	823,753
	August	214,068	4,143	184,395	97,431	125,591	317,248	9,552	-	952,428
	September	233,904	1,076	164,882	95,955	130,472	301,663	9,991	-	937,942
	October	251,513	3,983	144,443	96,735	124,398	291,879	10,230	-	923,181
	November	265,269	1,337	120,886	97,799	119,026	278,028	8,389	-	625,466
	December	211,353	8,581	155,984	99,124	112,439	270,243	11,371	-	657,741
	Total	2,913,518	35,957	1,835,408	1,136,872	1,358,504	3,529,383	110,946	-	10,443,967

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TAWKE REFINERY

	Month	Naptha (bbls)	Sweet Nap. (bbls)	Gasolene (bbls)	Kerosene (bbls)	Diesel (bbls)	Fuel Oil (bbls)	LPG (bbls)	Jet Fuel (bbls)	Total Products (bbls)
	January	596,005	-	418,066	42,789	377,418	1,102,293	37,139	38,074	2,015,779
	February	575,282	3,656	375,844	45,842	354,553	1,060,637	33,983	31,428	1,905,943
KALAK REFINERY	March	589,806	9,463	390,380	25,084	369,126	1,131,246	34,750	44,231	2,004,279
_	April	578,081	-	408,055	25,088	378,805	1,131,233	31,265	46,330	2,020,776
	May	586,251	-	420,886	27,196	367,428	1,131,637	34,738	43,369	2,025,255
	June	617,609	-	401,716	28,636	358,577	1,175,226	29,578	57,346	2,051,080
	July	621,648	-	412,552	46,486	362,804	1,242,176	23,685	56,830	2,144,533
	August	550,238	589	370,188	58,987	324,345	1,110,724	18,907	43,813	1,927,552
	September	383,155	-	208,603	24,275	197,758	712,393	10,170	44,055	1,197,252
	October	391,929	5,163	202,035	18,169	202,679	686,962	13,588	42,063	1,170,660
	November	441,918	6,949	187,897	38,482	253,632	800,288	12,940	27,955	1,328,143
	December	496,211	2,968	246,851	14,499	250,835	853,066	15,222	43,573	1,427,014
	Total	6,428,134	28,788	4,043,071	395,533	3,797,960	12,137,881	295,965	519,068	21,218,266

\*At the Kalak refinery, Naphtha is reprocessed into Gasoline Sweet Naphtha and Liquid Gas. Therefore Total Products refined excludes the first stage of Naphtha refining.

# KURDISTAN REGION OIL BY NUMBERS





# Employment in the KRG Oil & Gas Industry

3400+Individuals are employed by International Oil Companies in the KRG







#### **Top 10 IOC Employment: Expat vs. Local**

Local Expat Western Ŵ Zagros Gulf İ. İ Ť Ť ſ T Keystone Oil İ İ Search ņ Ņ ŗ DNO TTOPCO Ť Ť İ Í Oryx **HKN** j. Taqa Ŵ Chevron Gazprom **n** Ĥ

Total	1862	811	2673	70%
Gazprom	18	134	152	12%
Chevron	52	109	161	32%
Taqa	142	99	241	59%
HKN	109	55	164	66%
Oryx	93	31	124	75%
ΤΤΟΡϹΟ	414	136	550	75%
DNO	396	123	519	76%
Oil Search	81	25	106	76%
Gulf Keystone	281	75	356	79%
Western Zagros	276	24	300	92%
IOC	Local	Expat	Total	Local/Expa Ratio



nationalities in the KRG



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MOL Kalegran (pages 4-5-6-7-10-14) DNO Iraq A.S. (pages 2-3) Gazprom (pages 8-9)



**APPENDIX** Production, Exports, and Refining per Block Up to 31 December 2015

Block	Stock Tank Productions (BOE)	Exports via SOMO (BOE)	Exports via Trucking (BOE)	Export via KRG Pipeline (BBL)
Tawke	49,337,899	-	-	41,638,643
Khalakan	32,026	-	-	-
Sheikhan	11,134,567	-	3,753,853	4,909,360
Sarsang	1,020,770	-	-	-
Akre Bijel	355,907.78	-	-	-
Khurmala	103,849,143	-	-	65,452,028
Hawler	921,824	-	785,235	-
Taq Taq	42,378,998	-	-	26,661,160
Garmian	1,678,454	-	-	-
SUM	210,709,588	-	4,539,088	138,661,191

Block	Local Consumption (BOE)	Supplied to Kalak Refinery (BOE)	Supplied to Bazian Refinery (BOE)	Supplied to Tawke Refinery (BOE)	Operational Use on the Field (BOE)
Tawke	6,108,113	-	-	1,492,552	8,397
Khalakan	32,026	-	-	-	-
Sheikhan	2,473,045	-	-	-	-
Sarsang	1,009,622	-	-	-	-
Akre Bijel	366,566	-	-	-	-
Khurmala	15,179,214	23,867,620	-	-	-
Hawler	119,660	-	-	-	3,205
Taq Taq	4,459,911	-	11,312,147	-	2,590
Garmian	1,656,491	-	1,673	-	-
SUM	31,404,649	23,867,620	11,313,819	1,492,552	14,192





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