Reference list of R&D Center "Ahmadullins – Science & Technology"

NO	CONTRACT	CUSTOMER, ADDRESS	TITLE, A BRIEF DESCRIPTION OF THE PROJECT AND/OR OBJECT	TECHNICAL DESCRIPTION OF THE WORK PERFORMED	ADDRESS OF THE OBJECT OF THE EX-	CUSTOMERREPRESEN- TATIVE, FULL NAME, POSITTION, CONTACTS
1	12- 01/09/HHOC0 90042 Dated Jan.31,2009	LUKOIL-NGNOS, LLC Promzona, Ksto- vo city, Nizhniy Novgo- rod region, Rus- sian Federation, 606200	Supply of <i>KSM catalyst</i> for mercaptide saturated alkaline solution regeneration	11.5 m ³ of KSM catalyst were supplied to LUKOIL-NGNOS LLC	LUKOIL-NGNOS, LLC Promzona, Kstovo city, Nizhniy Novgo- rod region, Russian Federation, 606200	Chief Technologist of LUKOIL-NGNOS, LLC Chief Technologist, German G. Vasilev +7(83145) 5-30-82
2	00238 Dated	LUKOIL-NGNOS, LLC Promzona, Ksto- vo city, Nizhniy Novgo- rod region, Rus- sian Federation, 606200	Designer's technical supervision at commissioning of butane fraction (<i>BF</i>) sweetening unit at AGFU, with regeneration of alkali in the presence of KSM catalyst	Start-up of <i>BF</i> sweetening unit with oxidative regeneration of alkaline solution in the presence of KSM catalyst, results achieved: residual content of mercaptan sulfur less than 5 ppmw and total sulfur less than 10 ppm	LUKOIL-NGNOS, LLC Promzona, Kstovo city, Nizhniy Novgo- rod region, Russian Federation, 606200	Chief Technologist of LUKOIL-NGNOS, LLC Chief Technologist, German G. Vasilev +7(83145) 5-30-82
3	12-07/09-1 Dated Feb.09, 2010	RBC-Holding, LLC Building 2, 39, Nizhnyaya Kras- noselskaya str., Moscow, 105066	Basic Design for the reconstruction of PPBBF sweetening block of MTBE Unit in order to increase the plant capacity Slavneft – YaNOS, OJSC	Basic Designwas issued for the reconstruction of PPBBF Unit with the use of improved KSM-X catalyst	Slavneft - YaNOS, OJSC 130, Moscow ave., Yaroslavl, Russian Federation, 150000	Chief Technologist of RBC-Holding, LLC Sergey G. Dvornikov +7(495)954-35-28
4	12-05/10/ No65- 1447/10 Dated Aug.18, 2010	TAIF-NK, OJSC Promzona, Nizh- nekamsk, Tatars- tan, Russian	Consulting at commissioning PPBBF sweetening block with KSM catalyst	Recommendations are given for alkali regeneration block in order to replace homogeneous catalyst - IVKAZ to heterogeneous KSM catalyst	Gasoline production plant of TAIF-NK OJSC Promzona,	Director of Gasoline production Plant at TAIF-NK OJSC ILSHAT. G. Fatykhov

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		Federation, 423570			Nizhnekamsk, Ta- tarstan, Russian Federation, 423570	+7(8555)38-17-47
5	12-6/10 Dated Sep.27, 2010	KEDR-89, LLC - Scientific and Production Company Building 1, 67, Izmaylovsky boulevard, Moscow, 105077	Basic Design for liquefied gasessweetening of saturated and unsaturated sections at 'ROSNEFT-SyzranRefinery' OJSC	Basic Design was issued for liquefied gases sweetening from mercaptans at 'ROSNEFT-Syzran Refinery' OJSC.	'ROSNEFT-Syzran Refinery' OJSC 1, Astrakhans- kayastr., Syzran, Samara region, Rus- sian Federation, 446009	General Director of 'KEDR-89' LLC - Scientific and Production Company Yuriy N. Lebedev +7(495)465-01-59
6	02Д00584/11 Dated Oct. 24, 2011,		Manufacturing and supply of KSM-X catalyst according to Technical Specification 2175-043-02069639-2003 for regeneration of mercaptide containing alkaline solution at reconstructed PPBBF sweetening block	I S m of heterogeneous KSN/I-X cata-	'Slavneft - Ya- NOS'OJSC 130, Moscowave., Yaroslavl, Russian Federation, 150000	Equipment and General affairs Director at 'Slavneft - YaNOS',OJSC Vladimir F. Zhelyazkov +7(4852)44-03-43
7	12-3 Dated Feb. 17, 2012	75, Majeikiustr., Juodeikiai, Ma-	Manufacturing and supply of KSM catalyst according to Technical Specification 2175-043-02069639-2003 in order to replace former KS-2 catalyst for BBF sweetening	12 m° of KSM catalyst for BBF	'ORLEN Lietuva' 75, Majeikiustr., Juodeikiai, Majeikiai district, Lithuvania, LT-89467	First deputy General director of 'ORLEN Lie- tuva' VictorasVasilavichus Тел.+370 443 92627 Факс +370 443 92625
8	12-4 /018- 0661/12 Dated Mar. 21, 2012	TAIF-NK OJSC Promzona, Nizh- nekamsk city, Tatarstan, Rus-	Manufacturing and supply of KSM-X catalyst for alkali regeneration at PPBBF sweetening block	50% of usedKSM catalyst were replaced by KSM-X catalyst which is resistant to amines present in the regenerated alkaline solution	'TAIF-NK'OJSC Promzona, Nizhne- kamsk city,	Director of Gasoline production Plant atTAIF- NK OJSC ILSHAT G. Fatykhov

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		sian Federation, 423570			Tatarstan, Russian Federation, 423570	+7(8555)38-17-47
9	12-41 C∏Dated Aug. 01, 2012	PKIVokenergo- mash,LLC 11, Pamirs- kayastr., Nizhniy	Basic Design for of alkaline solution concentration and airpurification	Basic Designwas issued for alkaline solution concentration and airpurification from CO ₂	'TAIE-NK'OISC	Director of Gasoline production Plant atTAIF- NK OJSC ILSHAT G. Fatykhov
		Novgorod, Russian Federation	from CO ₂		423570	POSITTION, CONTACTS 1
10	12-6/10 Dated	NEFTEKHIM- PROEKT CJSC 22, 5 ^{-taya} Kras- noarmeyskaya	Basic Design for liquefied gases sweetening at 'GazpromNeft-	Basic Designwas issued for sweetening liquefied gases at HFC-2 with the following regeneration of mercaptides saturated alkaline solution in the presence of	'Gazpromneft- Moscow Refi- nery'OJSC	'NEFTEKHIMPROEKT CJSC' Moscow subsidi-
	May 12, 2012	str., St- Petersburg, Rus- sian Federation	Moscow RefineryOJSC	KSM-X catalyst	Building 3, 1, 2 nd quarter, Kapotnya, Moscow	
11	1277 Dated	Gazpromneft- MOR,OJSC	Providing a non-exclusive license to use the invention according to patent <i>No.</i> 2173330 for purification	'DEMERUS' LPG demercaptanization- mercaptan removal technology. Regis-	'Gazpromneft- Moscow Refinery' OJSC	'Gazpromneft-Moscow
	Dec. 12, 2012	Building 3, 1, 2 nd quarter, Ka- potnya, Moscow	of LPG at 100 th section of combined installation of oil refining (CIOR)	tered in FIPS No. РД0119882 from Mar. 1, 2013	Building 3, 1, 2 nd quarter, Kapotnya, Moscow	Director of Gasoline production Plant atTAll NK OJSC ILSHAT G. Fatykhov +7(8555)38-17-47 Director of 'NEFTEKHIMPROEKT CJSC' Moscow subsidiary Alexander V. Batselev +7(495)780-89-88 General Director of 'Gazpromneft-Moscow Refinery' OJSC Ashot M. Yeguizariyar +7(495)734-92-00 Director of CIOR project office at 'Gazpromneft Moscow Refinery' OJSC Alexander A. Meling +7(495)734-92-56
12	1287 Dated	Gazpromneft- MOR,OJSC	Basic Design for liquefied gases sweetening at 'Gazprom Neft-	Basic Designwas issued for LPG sweetening block of the section 100 CDU-	'Gazpromneft- Moscow Refinery' OJSC	office at 'Gazpromneft-
	Dec. 18, 2012	Building 3, 1, 2 nd quarter, Ka- potnya, Moscow	Moscow Refinery' OJSC for section 100 of CIOR	AVT-6 of CIOR	Building 3, 1, 2 nd quarter, Kapot- nya, Moscow	
13	12-5/HHOC	LUKOIL-NGNOS,	Basic Design for sweetening of pro-	Basic Designwas issued for propane-	LUKOIL-NGNOS'LLC	Chief Technologist of

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	120634 Dated Jul. 06, 2012	LLC Promzona, Kstovo city, Nizhniy Novgo- rod region, Rus- sian Federation, 606200	pane-propylene fraction fromFCC catalyticcrackingunit	propylene fraction sweetening block with alkaline regeneration in the pre- senceof KSM-X catalyst	Promzona, Kstovo city, Nizhniy Novgo- rod region, Russian Federation, 606200	'LUKOIL-NGNOS'LLC German G. Vasilev +7(83145) 5-30-82
14	ПИР 437-12- 2сп Dated Nov. 22, 2012	LUKOIL- NGNIINP,LLC 147a, Maxim Gorky str., Nizh- niy Novgorod, Russian Federa- tion		Basic Designwas issued for the reconstruction of butane fraction sweetening block in order to increase productivity by 40%	'LUKOIL-NGNOS'LLC Promzona, Kstovo city, Nizhniy Novgorod region, Russian Federation, 606200	General Director of 'LUKOIL-NGNOS' LLC
15	ПИР 437-12- 2сп Dated Nov. 22, 2012	LUKOIL- NGNIINP, LLC 147a, Maxim Gorky str., Nizh- niy Novgorod, Russian Federa- tion	Basic Designfor reconstruction of AGFU alkali regeneration block at 'LUKOIL-NGNOS' LLC in order to increaseproductivityby 40%	Basic Designwas issued for the reconstruction of alkaline solution regeneration block at 'LUKOIL-NGNOS' LLC in order to increase productivity by 40%	'LUKOIL- NGNIINP'LLC 147a, Maxim Gorky str., Nizhniy Novgo- rod, Russian Feder- ation	Chief Engineer of project'LUKOIL- NGNIINP' LLC Sergey N. Pashkin +7(8312)211-05-11
16	HHOC 130577 Dated Oct. 16, 2013	LUKOIL-NGNOS, LLC Kstovo, Nizhniy Novgorod re- gion, Russian Federation	Manufacturing and supply of KSM-X catalyst for the regeneration of mercaptide containing alkaline solution	KSM-X catalyst for regeneration of the alkaline solution with a high content of mercaptideswas manufactured and delivered to replace KSM catalyst		Deputy Head of Logistics Department at 'LUKOIL- NGNOS'LLC V.L. Fedotov +7(83145)5-35-34

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17	GIS/AKM/006 /14 Dated Jan. 23, 2014	Global Industrial Solutions (GIS) Company P.O. 71955, Qi- fan 13413, Ku- wait	Basic Designfor kerosene deodorization mobile block	Basic Designwas issued for the kerosene and diesel fractions deodorization mobile block with the use of heterogeneousKSM catalyst	International Station for Manufacturing of Refining, Factory No.52, building No. 656, road 16, 616 complex, Street Um Al Saad,Bahrain.	Mr. Essam Moustafa, General Manager, Mo- bile: 0097335121443, Mr. Mahmoud Abdullah Farag, phone: 0097339955001
18	GIS/AKM/007 /14 Dated Jan. 23, 2014	Global Industrial Solutions (GIS) Company P.O. 71955, Qi- fan 13413, Ku- wait	Manufacturing and <i>supply of KSM catalyst</i> for mobile deodorization unit	1.6 m ³ of KSM catalyst were manufactured and suppliedto Bahrain for kerosene treatment process from mercaptans	International Station for Manufacturing of Refining, Factory No.52, building No. 656, road 16, 616 complex, Street Um AlSaad, Bahrain.	Mr. EssamMoustafa, General Manager, Mo- bile: 0097335121443, Mr. Mahmoud Abdullah Farag, phone: 0097339955001
19	MH3- 14/00000/00 537/P/012 Dated Jul. 01, 2014	Gazpromneft- MOR,OJSC Building 3, 1, 2 nd quarter, Kapot- nya, Moscow	Manufacturing and supply of KSM catalyst for regeneration of mercaptide containing alkaline solution	KSM catalyst was manufactured and suppliedfor alkaline solution regeneration at HFC-2	'Gazpromneft- Moscow Refinery' OJSC Building 3, 1, 2 nd quarter, Kapotnya, Moscow	General Director of 'Gazpromneft-Moscow Refinery' OJSC Ashot M. Yeguizariyan +7 (495)734-92-00
20	12- 07/14/HHOC 140999 Dated Aug.21,2014	LUKOIL-NGNOS, LLC Kstovo, Nizhniy Novgorod re- gion, Russian Federation	Consulting at start-up of BF sweetening block with KSM-X catalyst	Start-upof <i>BF</i> sweetening unit with oxidative regeneration of alkaline solution in the presence of KSM-X catalyst, results achieved: residual content of mercaptan sulfur less than 5 ppmw and total sulfur less than 10 ppm	'LUKOIL-NGNOS'LLC Kstovo, Nizhniy Novgorod region	Deputy Head of Logistics Department of LUKOIL- NGNOS LLC V.L. Fedotov +7(83145)5-35-34

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21	12-3/14 Dated Aug. 22, 2014	KONAR, CJSC 4-B, Lenin ave., Chelyabinsk city, Russian Federa- tion, 454085	Basic Design for liquefied gases sweeteningfor Flexicoking unit, sec- tion— 5000at 'RN-Tuapse RefineryLLC	Basic Designwas issued for liquefied gases sweetening block with the following alkaline regeneration in the presence of KSM-X catalyst- Flexicoking unit section- 5000	'RN-Tuapse Refinery'LLC 1, Sochinskayastr., Tuapse city, Krasnodar region, Russian Federation, 352800	First Deputy of General Director at 'KONAR'CJSC E. I. Soshnikov erdalion@konar.ru
22	MH3- 14/07000/00 787/P/058 Dated Sep. 01, 2014	Building 3, 1, 2 nd quarter, Kapot-	Basic Design for liquefied gases sweetening for Flexicoking unit section- 250 at 'GazpromNeft-Moscow Refinery' OJSC	Basic Designwas issued for liquefied gases sweetening block with the following alkaline regeneration in the presence of KSM-X catalyst - Flexicoking unit section - 250	'Gazpromneft- Moscow Refinery' OJSC Building 3, 1, 2 nd quarter, Kapotnya, Moscow	General Director of 'Gazpromneft-Moscow Refinery' OJSC Ashot M. Yeguizariyan +7 (495)734-92-00
23	MH3- 14/09000/00 929/P/026 Dated Oct.01,2014	Gazpromneft- MOR, OJSC Building 3, 1, 2 nd quarter, Kapot- nya	Consulting at start-up of LPG sweetening block with KSM-X catalyst	Start-up of <i>LPG</i> sweetening block with oxidative regeneration of alkaline solution in the presence of KSM-X catalyst	'Gazpromneft- Moscow Refinery' OJSC Building 3, 1, 2 nd quarter, Kapotnya, Moscow	General Director of 'Gazpromneft-Moscow Refinery' OJSC Ashot M. Yeguizariyan +7 (495)734-92-00
24	12- 9/15/БНФ/Л/ 31/972/15/Π PЧ Dated 06.03.2015 Mar. 06, 2015		Providing a non-exclusive license to use the invention according to patents No. 2173330 & 2529500 for sweetening LPG from Coking Unit - 2000 at JSC "BASHNEFT"	License Registered in FIPS No. РД0176783 from July. 10, 2015	"BASHNEFT" JSOC branch office "Bashneft- Ufaneftekhim" 450077, Russia, Ufa, Karl Marx Str. 30, b.1	Director of the Depart- ment of managementof refining and petrochem- icalprogram moderniza- tion at ANK "Bash- neft"JSC Bedarev D.V. (495) 228-22-00
25	MH3- 15/07000/00 211/P/066 Dated	Gazpromneft- MOR, OJSC Building 3, 1, 2 nd quarter, Kapot-	Basic Design for liquefied gases sweetening for section 400 of CIOR at 'Gazprom Neft-Moscow Refinery' OJSC	Basic Design was issued for LPG sweetening block of section 100 at CDU-AVT-6 of CIOR	'Gazpromneft- Moscow Refi- nery'OJSC Building 3, 1, 2 nd	General Director of 'Gazpromneft-Moscow Refinery' OJSC Ashot M. Yeguizariyan

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	13.03.2015 Mar. 13, 2015	nya			quarter, Kapotnya	+7 (495)734-92-00
26	Purchase or- der no. HS15- PR-1358 Dated 09.04.2015 Apr. 09, 2015	Amec Foster Wheeler plc	Basic Design for sweetening of lique- fied gases from Coking Unit - 2000 at "BASHNEFT" JSC including COS re- moving	Basic Design was issued for liquefied gases sweetening block with the following alkaline regeneration in the presence of KSM-X catalyst including COS removing	525 N. Dairy Ash- ford Houston, Tx, USA	Project Manager Row- land Xavier Johnson D +1 713 929 5369 M +1 832 499 9804
27	018-12/3/15- 1782/15 Dated 03.09.2015	TAIF-NK OJSC Promzona, Nizh- nekamsk city, Tatarstan, Rus- sian Federation, 423570	Manufacturing and supply of KSM-X catalyst for alkali regeneration at PPBBF sweetening block	50% of used KSM catalyst were replaced by KSM-X catalyst which is resistant to amines present in the regenerated alka- line solution	'TAIF-NK'OJSC Promzona, Nizhne- kamsk city, Tatarstan, Russian Federation, 423570	Director of Gasoline production Plant atTAIF-NK OJSC ILSHAT G. Fatykhov +7(8555)38-17-47
28	БНФ/п/31/70 1/16/МТС Dated 15.02.2016	BASHNEFT, JSOC	Manufacturing and supply of KSM-X catalyst for alkali regeneration at BBF sweetening block	Used KSM catalyst were replaced by	"BASHNEFT" JSOC branch office "Bashneft- Ufaneftekhim" 450077, Russia, Ufa, Karl Marx Str. 30, b.1	Director of the Department of management of refining and petrochemical program moderniza-
29	MH3- 16/00000/00 377/P/012 Dated 16.05.2016	Gazpromneft- MOR, OJSC Building 3, 1, 2 nd quarter, Kapot- nya	Manufacturing and supply of KSM-X catalyst for alkali regeneration at BBF sweetening block	Used KSM catalyst were replaced by KSM-X catalyst	'Gazpromneft- Moscow Refi- nery'OJSC Building 3, 1, 2 nd quarter, Kapotnya	General Director of "Gazpromneft-Moscow Refinery" OJSC Ashot M. Yeguizariyan +7 (495)734-92-00

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30	12-2406/16 Dated 24.06.2016	JSC "ION- EXCHANGE TECHNOLOGY"	Basic Design for oxidation of mixed wastewaters at "Tomskneftekhim" by LOCOS technology"	Basic Design was issued for oxidation of mixed wastewaters at "Tomskneftekhim" by LOCOS technology"	JSC "ION- EXCHANGE TECH- NOLOGY" Moscow, Barclay st., b.6/5	General Director of JSC "ION-EXCHANGE TECHNOLOGY" Kopitin Yu.A. (495)627-57-59
31	02Д00087/17 Dated 27.12.2016	Slavneft- YaNOS, OJSC 130, Mosco- wave., Yaroslavl, Russian Federa- tion, 150000	catalyst for regeneration of	1.5 ton of heterogeneous KSM-X catalyst were manufactured and supplied	'Slavneft - Ya- NOS'OJSC 130, Moscowave., Yaroslavl, Russian Federation, 150000	Equipment and General affairs Director at 'Slavneft - YaNOS',OJSC Vladimir F. Zhelyazkov
32	12- 3/16/HHOC 170033 Dated 28.12.2016	LUKOIL-NNOS, LLC Kstovo, Nizhniy Novgorod re- gion, Russian Federation	Basic Design for sweetening of lique- fied gases from Coking Unit including COS removing	Basic Design was issued for liquefied gases sweetening block with the following alkaline regeneration in the presence of KSM-X catalyst including COS removing	'LUKOIL-NNOS' LLC Kstovo, Nizhniy Novgorod region	+7(4852)44-03-43 General Director of the project 'LUKOIL-NNOS' LLC Kovalenko I.A. (8442)96-31-72
33	12-2/17 Dated 17.01.2017	Mr. Mustafa Mohammed Saqi	Author's supervision services for start-up procedures of the Unit of White Spirit Treatment from Mercaptans and Acid Impurities	Start-up of White Spirit Treatment from Mercaptans and Acid Impurities	Industrial Zone of Kirkuk, No. 81213	Director, Mr. Mustafa Mohammed Saqi +9647721479292