



AmSpec Italia S.r.l.

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LAB N° 1281 L

MOD LABNA-ENEL Rev 05

Pg. 1/2

CLIENT ENEL TRADE S.p.A
SAMPLE CONTAINER plastic bag 100g + bag 2Kg
AMSPEC REF. 615-23-01277
PRODUCT (\$) COAL
SAMPLE ORIGIN (\$) CAMPIONE MEDIO GIORNALIERO
SAMPLING BY (\$) AMSPEC ITALIA by ASTM D 2013-21
PORT / HUB (\$) CIVITAVECCHIA
SAMPLING DATE (\$) 1-31/10/2023
RECEIVING DATE 16/11/2023
GRUPPO (\$) CRB - GR3

	SAMPLE	METHODS	CRB - GR3
	SEAL NR		1874465-1874456-A022316
	TEST REPORT		615-23-01277-001
AS RECEIVED EMISSION FACTOR ISO 1928:2020 + ASTM D5373-21 + Reg UE 2066/2018 19/12/2018 GU UE L334 31/12/2018 90,66	Total moisture %	ISO 589-B2:2008	5,8
	Ash %	ISO 1171:2010	14,24
	Volatile matter %	ISO 562:2010	25,6
	Fixed Carbon %	ASTM D3180-15	54,4
	Gross Calorific Value Kcal/kg	ISO 1928:2020	6291
	Gross Calorific Value Btu/lb	ISO 1928:2020	11324
	Net Calorific Value Kcal/kg	ISO 1928:2020	6062
	Net Calorific Value Btu/lb	ISO 1928:2020	10911
	Sulphur %	ASTM D4239-18e1	0,61
	Carbon %	ASTM D5373-21	62,8
	Total Hydrogen %	ASTM D5373-21	4,46
	Nitrogen %	ASTM D5373-21	1,34
	Coal Hydrogen %	ASTM D3180-15	3,81
	Oxygen %	ASTM D3176-15	11,4
AS DETERMINED	Chlorine ppm (*)	ASTM D6721-01(15)	40
	Fluorine ppm (*)	ASTM D3761-10	52
	Moisture %	ASTM D7582-15	2,18
	Ash %	ISO 1171:2010	14,79
	Volatile matter %	ISO 562:2010	26,6
	Fixed Carbon %	ASTM D7582-15	56,4
	Gross Calorific Value Kcal/kg	ISO 1928:2020	6533
	Gross Calorific Value Btu/lb	ISO 1928:2020	11758
	Net Calorific Value Kcal/kg	ISO 1928:2020	6317
	Net Calorific Value Btu/lb	ISO 1928:2020	11371
	Sulphur %	ASTM D4239-18e1	0,63
	Carbon %	ASTM D5373-21	65,2
	Total Hydrogen %	ASTM D5373-21	4,20
	Nitrogen %	ASTM D5373-21	1,39
DRY BASIS	Coal Hydrogen %	ASTM D3180-15	3,96
	Oxygen %	ASTM D3176-15	13,8
	Chlorine ppm (*)	ASTM D6721-01(15)	42
	Fluorine ppm (*)	ASTM D3761-10	54
	Ash %	ISO 1171:2010	15,12
	Volatile matter %	ISO 562:2010	27,2
	Fixed Carbon %	ASTM D3180-15	57,7
	Gross Calorific Value Kcal/kg	ISO 1928:2020	6678
	Gross Calorific Value Btu/lb	ISO 1928:2020	12021
	Net Calorific Value Kcal/kg	ISO 1928:2020	6470
	Net Calorific Value Btu/lb	ISO 1928:2020	11647
	Sulphur %	ASTM D4239-18e1	0,64
	Carbon %	ASTM D5373-21	66,7
	Nitrogen %	ASTM D5373-21	1,42
	Total Hydrogen %	ASTM D5373-21	4,05
	Oxygen %	ASTM D3176-15	12,1
	Chlorine ppm (*)	ASTM D6721-01(15)	43
	Fluorine ppm (*)	ASTM D3761-10	55

Precision parameter apply in the determination of the test results are specified above.

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Tests marked "*" are not included in the ISO/IEC 17025 accreditation of the laboratory

Napoli, 27/11/2023

dott. Francesco Anastasio
LAB MANAGER



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SAMPLING BY (\$)	AMSPEC ITALIA by ASTM D 2013-21
PORT / HUB (\$)	CIVITAVECCHIA
SAMPLING DATE (\$)	1-31/10/2023
RECEIVING DATE	16/11/2023
GRUPPO (\$)	ORB - GRH

Pg. 2/2

	LOT NR	METHODS	ORB - GRH
	SEAL NR		1874465-1874456- A022316
	TEST REPORT		615-23-01277-001
AS RECEIVED	Total moisture %	ISO 589-B2:2008	5,8
	Antimonio AR mg/kg	ASTM D6357-21a	<0,17
	Arsenico AR (*) mg/kg	ASTM D4606-15	<0,5
	Berillio AR mg/kg	ASTM D6357-21a	<0,42
	Cadmio AR mg/kg	ASTM D6357-21a	<0,02
	Cromo AR mg/kg	ASTM D6357-21a	16,58
	Manganese AR mg/kg	ASTM D6357-21a	58,95
	Mercurio AR (*) mg/kg	ASTM D3684-06	< 0,1
	Nichel AR mg/kg	ASTM D6357-21a	15,7
	Piombo AR mg/kg	ASTM D6357-21a	< 1,57
	Selenio AR (*) mg/kg	ASTM D4606-15	< 0.6
	Vanadio AR mg/kg	ASTM D6357-21a	16,04
	Zinco AR mg/kg	ASTM D6357-21a	17,04
AS DETERMINED	Moisture %	ASTM D7582-15	2,18
	Antimonio AD mg/kg	ASTM D6357-21a	<0,17
	Arsenico AD (*) mg/kg	ASTM D4606-15	<0,5
	Berillio AD mg/kg	ASTM D6357-21a	<0,42
	Cadmio AD mg/kg	ASTM D6357-21a	<0,02
	Cromo AD mg/kg	ASTM D6357-21a	17,22
	Manganese AD mg/kg	ASTM D6357-21a	61,22
	Mercurio AD (*) mg/kg	ASTM D3684-06	< 0,1
	Nichel AD mg/kg	ASTM D6357-21a	16,3
	Piombo AD mg/kg	ASTM D6357-21a	< 1,57
	Selenio AD (*) mg/kg	ASTM D4606-15	< 0.6
	Vanadio AD mg/kg	ASTM D6357-21a	16,66
	Zinco AD mg/kg	ASTM D6357-21a	17,69
DRY BASIS	Antimonio DB mg/kg	ASTM D6357-21a	<0,17
	Arsenico DB (#) mg/kg	ASTM D4606-15	<0,5
	Berillio DB mg/kg	ASTM D6357-21a	<0,42
	Cadmio DB mg/kg	ASTM D6357-21a	<0,02
	Cromo DB mg/kg	ASTM D6357-21a	17,6
	Manganese DB mg/kg	ASTM D6357-21a	62,58
	Mercurio DB (#) mg/kg	ASTM D3684-06	< 0,1
	Nichel DB mg/kg	ASTM D6357-21a	16,66
	Piombo DB mg/kg	ASTM D6357-21a	< 1,57
	Selenio DB (#) mg/kg	ASTM D4606-15	< 0.6
	Vanadio DB mg/kg	ASTM D6357-21a	17,03
	Zinco DB mg/kg	ASTM D6357-21a	18,08

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