



Fecha de Calibración: 20/5/2022
Fecha de Emisión: 20/5/2022

CERTIFICADO DE CALIBRACION N°: 183400



SILIQUNI S.R.L.
Pacheco 373

(54-0299) 477-4400
ventas@siliquini.com

Cliente:	GREEN OIL SERVICES SA	Equipo en uso:	REPARADO Y CALIBRADO
Instrumento:	DETECTOR ALTAIR 4XR (LEL, O2, CO, H2S) Grupo:	Equipo nuevo:	NO
S/N:	E0-00134742-C20	Fabricante:	Mine Safety Appliances Company

Gas Patrón	Objetivo a Verificar	Incert. del Gas	Número de Lote	Mediciones			Incert. de la Medición	Rango	SN sensor
				1	2	3			
Acido Sulfhidrico (H2S) 20 ppm	20 ppm	10	261032	20	20	20	2,0817 ppm	0 - 200 ppm	
Metano (CH4) 1,45 %	58 %	5	261032	58	58	58	2,9569 %	0 - 100 %	
Monóxido de Carbono (CO) 60 ppm	60 ppm	5	261032	60	60	60	3,0551 ppm	0 - 2000 ppm	
Oxígeno (O2) 15 %	15 %	5	261032	15	15	15	0,9465 %	0 - 30 %	

Calibración: Contraste con gas patrón trazable a patrones de peso NIST

Condiciones ambientales de Calibración: Cipolletti - Río Negro

Temperatura (°C): 16°C
Presión atmosférica (hPa): 1015 hPa
Humedad (%): 42 %

Procedimientos de Calibración: De acuerdo al manual de cada equipo

(*) Las especificaciones de tolerancia de medición se encuentran informadas en el manual del equipo.

"La calibración de los equipos, instrumentos y dispositivos utilizados, los métodos de análisis aplicados, y las acciones u omisiones son realizadas en forma exclusiva por personal de SILIQUNI S.R.L. sin intervención de COMPAÑIA MSA DE ARGENTINA S.A. quien no responderá por los mismos."

Límites en el uso: Indicados en el manual del equipo

Los resultados son válidos solamente para el equipo ensayado no siendo extensivos a cualquier otro.
La trazabilidad de los detectores MSA se realiza a través del número de serie

La reproducción de este documento sólo podrá hacerse íntegramente sin ninguna alteración.

Cantidad de hojas: 1

Javier Salvatierra
SERVICIO TÉCNICO
SILIQUNI S.R.L.

PortaGasTM
A Linde company

CERTIFICATE OF ANALYSIS

ISO 9001:2015 CERTIFIED
ISO 17034:2016 ACCREDITED
ISO/IEC 17025:2017 ACCREDITED

1202 E Sam Houston Parkway S,
Pasadena, TX 77503
Phone: (800) 548 2268 Fax: (713) 928 9961

PO Number: 4503028821
Manufactured For:
MSA Safety Sales, LLC
1000 Cranberry Woods Drive
Cranberry Township PA 16066
United States Of America

Work Order No: 36458800
Certification Date: 05-Jan-2022

Customer Part No: 10045035
Cylinder Size: 58DALS
Cylinder Content: 58 L (2 CU.FT.) @ 70 F (21 C) & 500 PSIG (3445Kpag)
Cylinder Lot No: 261032; 277 of 476 cylinders
Cylinder Serial Nos:

Cylinder Type: ISO 7866

BC304522, BC304805, BC333642, BC341202, BC359021, BC359035, BC363820, BC364061, BC364095, BC364096, BC377029, BC377066, BC377086, BC377226, BC377273, BC377294, BC378028, BC380858, BC384131, BC388131, BC389729, BC389769, BC389807, BC389862, BC389868, BC390330, BC390347, BC390389, BC390402, BC390465, BC390744, BC391685, BC391780, BC400253, BC400300, BC402553, BC402805, BC403013, BC403120, BC403171, BC403178, BC403272, BC403515, BC403955, BC406023, BC406145, BC406167, BC406192, BC406197, BC406217, BC406218, BC406220, BC406222, BC406225, BC406228, BC406229, BC406231, BC406232, BC406233, BC406234, BC406238, BC406239, BC406240, BC406242, BC406243, BC406249, BC406261, BC406273, BC406278, BC406284, BC406285, BC406288, BC406290, BC406291, BC406294, BC406296, BC406299, BC406304, BC406306, BC406318, BC406320, BC406326, BC406327, BC406328, BC407345, BC407365, BC407366, BC407371, BC407373, BC407374, BC407375, BC407378, BC407399, BC407424, BC407426, BC407462, BC407465, BC407466, BC407467, BC407469, BC407471, BC407489, BC407495, BC407496, BC407506, BC407509, BC407514, BC407521, BC407522, BC407524, BC407529, BC407542, BC407543, BC407746, BC407755, BC407757, BC407763, BC407764, BC407765, BC407766, BC407769, BC407770, BC407771, BC407772, BC407773, BC407776, BC407779, BC407781, BC407783, BC407784, BC407785, BC407791, BC407801, BC407802, BC407814, BC407816, BC407817, BC407819, BC407820, BC407821, BC407822, BC407823, BC407825, BC407830, BC407832, BC407835, BC407836, BC407838, BC407840, BC407841, BC407843, BC407844, BC407848, BC407851, BC407853, BC407854, BC407855, BC407857, BC407859, BC407860, BC407861, BC407863, BC407864, BC407865, BC407868, BC407869, BC407870, BC407873, BC407874, BC407876, BC407877, BC407879, BC407880, BC407883, BC407893, BC407896, BC407899, BC407902, BC407903, BC407904, BC407905, BC407909, BC407912, BC407913, BC407914, BC407916, BC407917, BC407924, BC407925, BC407928, BC407934, BC407935, BC407936, BC407939, BC407940, BC407941, BC407942, BC407957, BC407958, BC407959, BC408006, BC408007, BC408145, BC408146, BC408166, BC408169, BC408283, BC408293, BC408294, BC408299, BC408302, BC408313, BC408327, BC408412, BC408474, BC408484, BC408564, BC408570, BC408590, BC408593, BC408604, BC408612, BC408613, BC408619, BC408620, BC408634, BC408635, BC408636, BC408637, BC408639, BC408641, BC408642, BC408643, BC408645, BC408646, BC408648, BC408650, BC408652, BC408659, BC408695, BC408696, BC408697, BC408698, BC408701, BC408703, BC408715, BC408736, BC408765, BC408766, BC408768, BC408770, BC408771, BC408776, BC408816, BC408855, BC408858, BC408864, BC408870, BC408871, BC408876, BC408877, BC408878, BC408881, BC408889, BC408892, BC408902, BC408903, BC408907, BC408914, BC408928, BC408930, BC408933, BC408957, BC409073, BC409075, BC413935, BC414322

Expiration Date: Dec 2023

Component	Nominal	Accuracy	Analytical Method
HYDROGEN SULFIDE	20 PPM (vol)	+/- 10%	Automated Electrochemical Sensor 2.0
CARBON MONOXIDE	60 PPM (vol)	+/- 5%	Horiba CO Analyzer VIA-510_97KPEHE
PENTANE EQUIVALENT 58% LEL	(METHANE - 1.45% vol)	+/- 5%	Mocon 9000 THC_0317ON0931
OXYGEN	15% (vol)	+/- 5%	Teledyne 3000M Series Percent Oxygen Analyzer