



Athens, TX (903) 677-0700 . Beeville, TX (361) 354-5200 . Midland, TX (432) 704-5351

GAS ANALYSIS REPORT

LABORATORY REPORT NUMBER

211207-9999-12-120721-10

PHYSICAL CONSTANTS PER GPA 2145-16

COMPANY:	NOVO OIL AND GAS	CYLINDER NO.:	5112
STATION:	CUBLEBRA BLUFF CTB #3	DATE ON:	12/01/2021
PROD.:	NOVO OIL AND GAS	DATE OFF:	
LEASE:	CUBLEBRA BLUFF CTB #3	DATE ANALYZED:	12/07/2021
TEMP:		EFFECTIVE DATE:	12/01/2021
PRESS.		SAMPLED BY	
COMPONENT	MOLE %	GPM	WT. %
H2S	0.0000		
OXYGEN	0.0010		0.0010
CARBON DIOXIDE	0.0220		0.0440
NITROGEN	1.1680		1.4900
METHANE	76.8980		56.1660
ETHANE	11.8440	3.1620	16.2150
PROPANE	5.2770	1.4510	10.5940
I-BUTANE	0.7880	0.2570	2.0850
N-BUTANE	1.6860	0.5310	4.4620
I-PENTANE	0.4460	0.1630	1.4650
N-PENTANE	0.4760	0.1720	1.5640
HEXANE PLUS	1.3940	0.6040	5.9140

TOTAL	100.0000	6.3400	100.0000
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PRESSURE BASE	14.65	14.73	15.025
BTU DRY BASIS	1309.24	1316.39	1342.76
BTU SAT BASIS	1286.33	1293.36	1319.26

REAL GRAVITY 0.7611

H2S: 0 ppm

Z FACTOR 0.9960

SAMPLE TYPE: SPOT

MERCAPTAN PPM: 0

ANALYZED BY: PETER DOUGLAS

CHROMATOGRAPH 9999-12-120721-10

06-20-2018



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GAS ANALYSIS REPORT

LABORATORY REPORT NUMBER

211207-9999-12-120721-04

PHYSICAL CONSTANTS PER GPA 2145-16

COMPANY:	NOVO OIL AND GAS	CYLINDER NO.:	1800
STATION:	GOONCH FC 0407 235H	DATE ON:	12/01/2021
PROD.:	NOVO OIL AND GAS	DATE OFF:	
LEASE:	GOONCH FC 0407 235H	DATE ANALYZED:	12/07/2021
TEMP:		EFFECTIVE DATE:	12/01/2021
PRESS.		SAMPLED BY	
COMPONENT	MOLE %	GPM	WT. %
H2S	0.0000		
OXYGEN	0.0020		0.0030
CARBON DIOXIDE	0.0770		0.1540
NITROGEN	1.2520		1.5950
METHANE	75.8860		55.3540
ETHANE	12.5040	3.3380	17.0960
PROPANE	5.8590	1.6110	11.7470
I-BUTANE	0.7510	0.2450	1.9850
N-BUTANE	1.7200	0.5410	4.5460
I-PENTANE	0.3710	0.1350	1.2170
N-PENTANE	0.4000	0.1450	1.3120
HEXANE PLUS	1.1780	0.5100	4.9910

TOTAL	100.0000	6.5250	100.0000
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PRESSURE BASE	14.65	14.73	15.025
BTU DRY BASIS	1308.13	1315.27	1341.61
BTU SAT BASIS	1285.23	1292.25	1318.13

REAL GRAVITY 0.7621

H2S: 0 ppm

Z FACTOR 0.9960

SAMPLE TYPE: SPOT

MERCAPTAN PPM: 0

ANALYZED BY: PETER DOUGLAS

CHROMATOGRAPH 9999-12-120721-04

06-20-2018



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GAS ANALYSIS REPORT

LABORATORY REPORT NUMBER

211207-9999-12-120721-08

PHYSICAL CONSTANTS PER GPA 2145-16

COMPANY:	NOVO OIL AND GAS	CYLINDER NO.:	35
STATION:	GOONCH FC 0409 134H	DATE ON:	12/01/2021
PROD.:	NOVO OIL AND GAS	DATE OFF:	
LEASE:	GOONCH FC 0409 134H	DATE ANALYZED:	12/07/2021
TEMP:		EFFECTIVE DATE:	12/012/021
PRESS.		SAMPLED BY	

COMPONENT	MOLE %	GPM	WT. %
H2S	0.0000		
OXYGEN	0.0010		0.0010
CARBON DIOXIDE	0.0940		0.1900
NITROGEN	1.1810		1.5230
METHANE	77.9140		57.5380
ETHANE	10.2130	2.7260	14.1360
PROPANE	6.2390	1.7160	12.6640
I-BUTANE	0.3690	0.1210	0.9870
N-BUTANE	1.8100	0.5700	4.8430
I-PENTANE	0.7640	0.2790	2.5370
N-PENTANE	0.5050	0.1830	1.6770
HEXANE PLUS	0.9100	0.3940	3.9040

TOTAL	100.0000	5.9890	100.0000
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PRESSURE BASE	14.65	14.73	15.025
BTU DRY BASIS	1294.18	1301.25	1327.31
BTU SAT BASIS	1271.54	1278.48	1304.08

REAL GRAVITY 0.7527

H2S: 0 ppm

Z FACTOR 0.9961

SAMPLE TYPE: SPOT

MERCAPTAN PPM: 0

ANALYZED BY: PETER DOUGLAS

CHROMATOGRAPH 9999-12-120721-08

06-20-2018



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GAS ANALYSIS REPORT

LABORATORY REPORT NUMBER

211207-9999-12-120721-16

PHYSICAL CONSTANTS PER GPA 2145-16

COMPANY:	NOVO OIL AND GAS	CYLINDER NO.:	2033
STATION:	GOONCH FC 0409 136H	DATE ON:	12/01/2021
PROD.:	NOVO OIL AND GAS	DATE OFF:	
LEASE:	GOONCH FC 0409 136H	DATE ANALYZED:	12/07/2021
TEMP:		EFFECTIVE DATE:	12/01/2021
PRESS.		SAMPLED BY	
COMPONENT	MOLE %	GPM	WT. %
H2S	0.0000		
OXYGEN	0.0020		0.0030
CARBON DIOXIDE	0.0800		0.1580
NITROGEN	1.0950		1.3740
METHANE	77.5620		55.7290
ETHANE	11.0920	2.9620	14.9380
PROPANE	4.5320	1.2470	8.9510
I-BUTANE	0.7870	0.2570	2.0490
N-BUTANE	1.5830	0.4980	4.1210
I-PENTANE	0.4910	0.1790	1.5870
N-PENTANE	0.5270	0.1910	1.7030
HEXANE PLUS	2.2490	0.9740	9.3870

TOTAL	100.0000	6.3080	100.0000
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PRESSURE BASE	14.65	14.73	15.025
BTU DRY BASIS	1328.49	1335.74	1362.49
BTU SAT BASIS	1305.24	1312.37	1338.65

REAL GRAVITY 0.7738

H2S: 0 ppm

Z FACTOR 0.9958

SAMPLE TYPE: SPOT

MERCAPTAN PPM: 0

ANALYZED BY: PETER DOUGLAS

CHROMATOGRAPH 9999-12-120721-16

06-20-2018



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GAS ANALYSIS REPORT

LABORATORY REPORT NUMBER

211207-9999-12-120721-09

PHYSICAL CONSTANTS PER GPA 2145-16

COMPANY:	NOVO OIL AND GAS	CYLINDER NO.:	5388
STATION:	GOONCH FC 0409 214H	DATE ON:	12/01/2021
PROD.:	NOVO OIL AND GAS	DATE OFF:	
LEASE:	GOONCH FC 0409 214H	DATE ANALYZED:	12/07/2021
TEMP:		EFFECTIVE DATE:	12/01/2021
PRESS.		SAMPLED BY	

COMPONENT	MOLE %	GPM	WT. %
H2S	0.0000		
OXYGEN	0.0000		0.0000
CARBON DIOXIDE	0.1790		0.3640
NITROGEN	0.8660		1.1200
METHANE	80.0770		59.3360
ETHANE	9.8690	2.6350	13.7060
PROPANE	3.9220	1.0790	7.9880
I-BUTANE	0.6940	0.2270	1.8630
N-BUTANE	1.4300	0.4500	3.8390
I-PENTANE	0.4840	0.1770	1.6130
N-PENTANE	0.5130	0.1860	1.7090
HEXANE PLUS	1.9660	0.8520	8.4620
TOTAL	100.0000	5.6060	100.0000

PRESSURE BASE	14.65	14.73	15.025
BTU DRY BASIS	1293.1	1300.16	1326.20
BTU SAT BASIS	1270.47	1277.41	1302.99

REAL GRAVITY 0.7501

H2S: 0 ppm

Z FACTOR 0.9961

SAMPLE TYPE: SPOT

MERCAPTAN PPM: 0

ANALYZED BY: PETER DOUGLAS

CHROMATOGRAPH 9999-12-120721-09

06-20-2018



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GAS ANALYSIS REPORT

LABORATORY REPORT NUMBER

211207-9999-12-120721-12

PHYSICAL CONSTANTS PER GPA 2145-16

COMPANY:	NOVO OIL AND GAS	CYLINDER NO.:	9569
STATION:	GOONCH FC 0409 234H	DATE ON:	12/01/2021
PROD.:	NOVO OIL AND GAS	DATE OFF:	
LEASE:	GOONCH FC 0409 234H	DATE ANALYZED:	12/07/2021
TEMP:		EFFECTIVE DATE:	12/01/2021
PRESS.		SAMPLED BY	
COMPONENT	MOLE %	GPM	WT. %
H ₂ S	0.0000		
OXYGEN	0.0030		0.0040
CARBON DIOXIDE	0.1480		0.2740
NITROGEN	1.6320		1.9200
METHANE	72.5650		48.9000
ETHANE	12.5280	3.3470	15.8240
PROPANE	6.2990	1.7340	11.6680
I-BUTANE	0.8550	0.2800	2.0870
N-BUTANE	2.0530	0.6470	5.0120
I-PENTANE	0.5280	0.1930	1.6000
N-PENTANE	0.6280	0.2270	1.9030
HEXANE PLUS	2.7610	1.1970	10.8080

TOTAL	100.0000	7.6250	100.0000
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PRESSURE BASE	14.65	14.73	15.025
BTU DRY BASIS	1398.14	1405.78	1433.93
BTU SAT BASIS	1373.67	1381.18	1408.84

REAL GRAVITY 0.8256

H₂S: 0 ppm

Z FACTOR 0.9952

SAMPLE TYPE: SPOT

MERCAPTAN PPM: 0

ANALYZED BY: PETER DOUGLAS

CHROMATOGRAPH 9999-12-120721-12

06-20-2018



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GAS ANALYSIS REPORT

LABORATORY REPORT NUMBER

211207-9999-12-120721-06

PHYSICAL CONSTANTS PER GPA 2145-16

COMPANY:	NOVO OIL AND GAS	CYLINDER NO.:	9263
STATION:	GOONCH FC 0409 236H	DATE ON:	12/01/2021
PROD.:	NOVO OIL AND GAS	DATE OFF:	
LEASE:	GOONCH FC 0409 236H	DATE ANALYZED:	12/07/2021
TEMP:		EFFECTIVE DATE:	12/01/2021
PRESS.		SAMPLED BY	
COMPONENT	MOLE %	GPM	WT. %
H2S	0.0000		
OXYGEN	0.0010		0.0020
CARBON DIOXIDE	0.0980		0.2040
NITROGEN	1.1090		1.4690
METHANE	79.0390		59.9640
ETHANE	11.2760	3.0090	16.0350
PROPANE	4.5200	1.2430	9.4260
I-BUTANE	0.7300	0.2380	2.0070
N-BUTANE	1.4960	0.4710	4.1120
I-PENTANE	0.4210	0.1540	1.4360
N-PENTANE	0.4310	0.1560	1.4710
HEXANE PLUS	0.8790	0.3810	3.8740

TOTAL	100.0000	5.6520	100.0000
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PRESSURE BASE	14.65	14.73	15.025
BTU DRY BASIS	1263.92	1270.82	1296.27
BTU SAT BASIS	1241.8	1248.58	1273.59

REAL GRAVITY 0.7324

H2S: 0 ppm

Z FACTOR 0.9964

SAMPLE TYPE: SPOT

MERCAPTAN PPM: 0

ANALYZED BY: PETER DOUGLAS

CHROMATOGRAPH 9999-12-120721-06

06-20-2018



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GAS ANALYSIS REPORT

LABORATORY REPORT NUMBER

211207-9999-12-120721-15

PHYSICAL CONSTANTS PER GPA 2145-16

COMPANY:	NOVO OIL AND GAS	CYLINDER NO.:	9425
STATION:	GOONCH FED COM 0409 225H	DATE ON:	12/01/2021
PROD.:	NOVO OIL AND GAS	DATE OFF:	
LEASE:	GOONCH FC 0409 225H	DATE ANALYZED:	12/07/2021
TEMP:		EFFECTIVE DATE:	12/01/2021
PRESS.		SAMPLED BY	
COMPONENT	MOLE %	GPM	WT. %
H2S	0.0000		
OXYGEN	0.0070		0.0090
CARBON DIOXIDE	0.1000		0.1830
NITROGEN	0.9160		1.0650
METHANE	74.2690		49.4530
ETHANE	11.5510	3.0870	14.4170
PROPANE	5.2930	1.4570	9.6880
I-BUTANE	0.8560	0.2800	2.0650
N-BUTANE	1.9250	0.6060	4.6440
I-PENTANE	0.6260	0.2290	1.8750
N-PENTANE	0.7310	0.2650	2.1890
HEXANE PLUS	3.7260	1.6160	14.4120

TOTAL	100.0000	7.5400	100.0000
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PRESSURE BASE	14.65	14.73	15.025
BTU DRY BASIS	1426.49	1434.28	1463.00
BTU SAT BASIS	1401.52	1409.18	1437.40

REAL GRAVITY 0.8356

H2S: 0 ppm

Z FACTOR 0.9950

SAMPLE TYPE: SPOT

MERCAPTAN PPM: 0

ANALYZED BY: PETER DOUGLAS

CHROMATOGRAPH 9999-12-120721-15

06-20-2018



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GAS ANALYSIS REPORT

LABORATORY REPORT NUMBER

211207-9999-12-120721-11

PHYSICAL CONSTANTS PER GPA 2145-16

COMPANY:	NOVO OIL AND GAS	CYLINDER NO.:	5258
STATION:	RANA SALADA A POD SALES	DATE ON:	12/01/2021
PROD.:	NOVO OIL AND GAS	DATE OFF:	
LEASE:	RANA SALADA A POD SALES	DATE ANALYZED:	12/07/2021
TEMP:		EFFECTIVE DATE:	12/01/2021
PRESS.		SAMPLED BY	
COMPONENT	MOLE %	GPM	WT. %
H2S	0.0000		
OXYGEN	0.0100		0.0150
CARBON DIOXIDE	0.0750		0.1510
NITROGEN	0.8210		1.0530
METHANE	78.3160		57.5350
ETHANE	11.1840	2.9860	15.4010
PROPANE	4.6650	1.2830	9.4200
I-BUTANE	0.7370	0.2410	1.9620
N-BUTANE	1.5860	0.4990	4.2220
I-PENTANE	0.4460	0.1630	1.4740
N-PENTANE	0.4680	0.1690	1.5460
HEXANE PLUS	1.6920	0.7330	7.2210

TOTAL	100.0000	6.0740	100.0000
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PRESSURE BASE	14.65	14.73	15.025
BTU DRY BASIS	1306.53	1313.66	1339.97
BTU SAT BASIS	1283.67	1290.67	1316.52

REAL GRAVITY 0.7566

H2S: 0 ppm

Z FACTOR 0.9960

SAMPLE TYPE: SPOT

MERCAPTAN PPM: 0

ANALYZED BY: PETER DOUGLAS

CHROMATOGRAPH 9999-12-120721-11

06-20-2018



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GAS ANALYSIS REPORT

LABORATORY REPORT NUMBER

211207-9999-12-120721-07

PHYSICAL CONSTANTS PER GPA 2145-16

COMPANY:	NOVO OIL AND GAS	CYLINDER NO.:	5185
STATION:	RANA SALADA E POD SALES	DATE ON:	12/01/2021
PROD.:	NOVO OIL AND GAS	DATE OFF:	
LEASE:	RANA SALADA E POD SALES	DATE ANALYZED:	12/07/2021
TEMP:		EFFECTIVE DATE:	12/01/2021
PRESS.		SAMPLED BY	
COMPONENT	MOLE %	GPM	WT. %
H ₂ S	0.0000		
OXYGEN	0.0520		0.0740
CARBON DIOXIDE	0.1660		0.3250
NITROGEN	7.1530		8.9080
METHANE	71.9380		51.3040
ETHANE	10.9990	2.9360	14.7020
PROPANE	4.8020	1.3200	9.4130
I-BUTANE	0.7960	0.2600	2.0570
N-BUTANE	1.7350	0.5460	4.4830
I-PENTANE	0.5330	0.1950	1.7100
N-PENTANE	0.5780	0.2090	1.8540
HEXANE PLUS	1.2480	0.5400	5.1700

TOTAL	100.0000	6.0060	100.0000
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PRESSURE BASE	14.65	14.73	15.025
BTU DRY BASIS	1233.75	1240.48	1265.33
BTU SAT BASIS	1212.16	1218.77	1243.18

REAL GRAVITY 0.7793

H₂S: 0 ppm

Z FACTOR 0.9963

SAMPLE TYPE: SPOT

MERCAPTAN PPM: 0

ANALYZED BY: PETER DOUGLAS

CHROMATOGRAPH 9999-12-120721-07

06-20-2018



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GAS ANALYSIS REPORT

LABORATORY REPORT NUMBER

211207-9999-12-120721-14

PHYSICAL CONSTANTS PER GPA 2145-16

COMPANY:	NOVO OIL AND GAS	CYLINDER NO.:	5086
STATION:	RANA SALADA FC 0504 133H	DATE ON:	12/01/2021
PROD.:	NOVO OIL AND GAS	DATE OFF:	
LEASE:	RANA SALADA FC 0504 133H	DATE ANALYZED:	12/07/2021
TEMP:		EFFECTIVE DATE:	12/01/2021
PRESS.		SAMPLED BY	
COMPONENT	MOLE %	GPM	WT. %
H2S	0.0000		
OXYGEN	0.0060		0.0080
CARBON DIOXIDE	0.1300		0.2470
NITROGEN	1.9400		2.3470
METHANE	75.4960		52.3040
ETHANE	11.0360	2.9480	14.3310
PROPANE	4.7640	1.3110	9.0720
I-BUTANE	0.7980	0.2610	2.0030
N-BUTANE	1.7650	0.5560	4.4300
I-PENTANE	0.5600	0.2050	1.7450
N-PENTANE	0.6520	0.2360	2.0310
HEXANE PLUS	2.8530	1.2370	11.4820

TOTAL	100.0000	6.7540	100.0000
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PRESSURE BASE	14.65	14.73	15.025
BTU DRY BASIS	1357.96	1365.37	1392.71
BTU SAT BASIS	1334.19	1341.48	1368.34

REAL GRAVITY 0.8028

H2S: 0 ppm

Z FACTOR 0.9955

SAMPLE TYPE: SPOT

MERCAPTAN PPM: 0

ANALYZED BY: PETER DOUGLAS

CHROMATOGRAPH 9999-12-120721-14

06-20-2018



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GAS ANALYSIS REPORT

LABORATORY REPORT NUMBER

211207-9999-12-120721-13

PHYSICAL CONSTANTS PER GPA 2145-16

COMPANY:	NOVO OIL AND GAS	CYLINDER NO.:	5085
STATION:	RANA SALADA FC 0504 214H	DATE ON:	12/01/2021
PROD.:	NOVO OIL AND GAS	DATE OFF:	
LEASE:	RANA SALADA FC 0504 214H	DATE ANALYZED:	12/07/2021
TEMP:		EFFECTIVE DATE:	12/01/2021
PRESS.		SAMPLED BY	
COMPONENT	MOLE %	GPM	WT. %
H ₂ S	0.0000		
OXYGEN	0.0090		0.0120
CARBON DIOXIDE	0.1490		0.2830
NITROGEN	11.1270		13.4320
METHANE	68.2220		47.1590
ETHANE	10.6130	2.8330	13.7510
PROPANE	4.6020	1.2650	8.7440
I-BUTANE	0.7670	0.2500	1.9210
N-BUTANE	1.6440	0.5170	4.1170
I-PENTANE	0.4960	0.1810	1.5420
N-PENTANE	0.5320	0.1920	1.6540
HEXANE PLUS	1.8390	0.7960	7.3850

TOTAL	100.0000	6.0340	100.0000
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PRESSURE BASE	14.65	14.73	15.025
BTU DRY BASIS	1207.41	1214.01	1238.32
BTU SAT BASIS	1186.28	1192.76	1216.65

REAL GRAVITY 0.8040

H₂S: 0 ppm

Z FACTOR 0.9963

SAMPLE TYPE: SPOT

MERCAPTAN PPM: 0

ANALYZED BY: PETER DOUGLAS

CHROMATOGRAPH 9999-12-120721-13

06-20-2018



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GAS ANALYSIS REPORT

LABORATORY REPORT NUMBER

211207-9999-12-120721-02

PHYSICAL CONSTANTS PER GPA 2145-16

COMPANY:	NOVO OIL AND GAS	CYLINDER NO.:	5162
STATION:	RANA SALADA FC 0504 234H	DATE ON:	12/01/2021
PROD.:	NOVO OIL AND GAS	DATE OFF:	
LEASE:	RANA SALADA FC 0504 234H	DATE ANALYZED:	12/07/2021
TEMP:		EFFECTIVE DATE:	12/01/2021
PRESS.		SAMPLED BY	
COMPONENT	MOLE %	GPM	WT. %
H2S	0.0000		
OXYGEN	0.0020		0.0030
CARBON DIOXIDE	0.1020		0.1920
NITROGEN	1.2600		1.5110
METHANE	75.1390		51.6060
ETHANE	11.4520	3.0590	14.7420
PROPANE	5.1080	1.4060	9.6430
I-BUTANE	0.8710	0.2850	2.1670
N-BUTANE	1.9070	0.6010	4.7450
I-PENTANE	0.6200	0.2260	1.9150
N-PENTANE	0.7140	0.2590	2.2050
HEXANE PLUS	2.8250	1.2250	11.2710

TOTAL	100.0000	7.0610	100.0000
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PRESSURE BASE	14.65	14.73	15.025
BTU DRY BASIS	1380.99	1388.53	1416.34
BTU SAT BASIS	1356.83	1364.24	1391.56

REAL GRAVITY 0.8099

H2S: 0 ppm

Z FACTOR 0.9954

SAMPLE TYPE: SPOT

MERCAPTAN PPM: 0

ANALYZED BY: PETER DOUGLAS

CHROMATOGRAPH 9999-12-120721-02

06-20-2018



Athens, TX (903) 677-0700 . Beeville, TX (361) 354-5200 . Midland, TX (432) 704-5351

GAS ANALYSIS REPORT

LABORATORY REPORT NUMBER

211207-9999-12-120721-03

PHYSICAL CONSTANTS PER GPA 2145-16

COMPANY:	NOVO OIL AND GAS	CYLINDER NO.:	5208
STATION:	RANA SALADA FC 0605 121H	DATE ON:	12/01/2021
PROD.:	NOVO OIL AND GAS	DATE OFF:	
LEASE:	RANA SALADA FC 0605 121H	DATE ANALYZED:	12/07/2021
TEMP:		EFFECTIVE DATE:	12/01/2021
PRESS.		SAMPLED BY	

COMPONENT	MOLE %	GPM	WT. %
H2S	0.0000		
OXYGEN	0.0150		0.0220
CARBON DIOXIDE	0.1080		0.2190
NITROGEN	2.2350		2.8790
METHANE	77.2710		56.9970
ETHANE	11.1100	2.9660	15.3600
PROPANE	4.6450	1.2770	9.4180
I-BUTANE	0.7390	0.2410	1.9750
N-BUTANE	1.5950	0.5020	4.2620
I-PENTANE	0.4570	0.1670	1.5160
N-PENTANE	0.4830	0.1750	1.6020
HEXANE PLUS	1.3420	0.5810	5.7500
TOTAL	100.0000	5.9090	100.0000

PRESSURE BASE	14.65	14.73	15.025
BTU DRY BASIS	1277.33	1284.3	1310.02
BTU SAT BASIS	1254.97	1261.83	1287.10

REAL GRAVITY 0.7535

H2S: 0 ppm

Z FACTOR 0.9962

SAMPLE TYPE: SPOT

MERCAPTAN PPM: 0

ANALYZED BY: PETER DOUGLAS

CHROMATOGRAPH 9999-12-120721-03

06-20-2018



Athens, TX (903) 677-0700 . Beeville, TX (361) 354-5200 . Midland, TX (432) 704-5351

GAS ANALYSIS REPORT

LABORATORY REPORT NUMBER

211207-9999-12-120721-05

PHYSICAL CONSTANTS PER GPA 2145-16

COMPANY:	NOVO OIL AND GAS	CYLINDER NO.:	12147
STATION:	RANA SALADA FC 0605 211H	DATE ON:	12/01/2021
PROD.:	NOVO OIL AND GAS	DATE OFF:	
LEASE:	RANA SALADA FC 0605 211H	DATE ANALYZED:	12/07/2021
TEMP:		EFFECTIVE DATE:	12/01/2021
PRESS.		SAMPLED BY	
COMPONENT	MOLE %	GPM	WT. %
H ₂ S	0.0000		
OXYGEN	0.0070		0.0100
CARBON DIOXIDE	0.1150		0.2360
NITROGEN	0.8160		1.0660
METHANE	78.6380		58.8090
ETHANE	11.3170	3.0210	15.8630
PROPANE	4.7220	1.2980	9.7060
I-BUTANE	0.7530	0.2460	2.0400
N-BUTANE	1.6000	0.5030	4.3350
I-PENTANE	0.4460	0.1630	1.5000
N-PENTANE	0.4640	0.1680	1.5610
HEXANE PLUS	1.1220	0.4860	4.8740

TOTAL	100.0000	5.8850	100.0000
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PRESSURE BASE	14.65	14.73	15.025
BTU DRY BASIS	1284.87	1291.89	1317.76
BTU SAT BASIS	1262.39	1269.28	1294.70

REAL GRAVITY 0.7432

H₂S: 0 ppm

Z FACTOR 0.9962

SAMPLE TYPE: SPOT

MERCAPTAN PPM: 0

ANALYZED BY: PETER DOUGLAS

CHROMATOGRAPH 9999-12-120721-05

06-20-2018



Athens, TX (903) 677-0700 . Beeville, TX (361) 354-5200 . Midland, TX (432) 704-5351

GAS ANALYSIS REPORT

LABORATORY REPORT NUMBER

211207-9999-12-120721-01

PHYSICAL CONSTANTS PER GPA 2145-16

COMPANY:	NOVO OIL AND GAS	CYLINDER NO.:	5117
STATION:	RANA SALADA FC 0605 231H	DATE ON:	12/01/2021
PROD.:	NOVO OIL AND GAS	DATE OFF:	
LEASE:	RANA SALADA FC 0605 231H	DATE ANALYZED:	12/07/2021
TEMP:		EFFECTIVE DATE:	12/01/2021
PRESS.		SAMPLED BY	
COMPONENT	MOLE %	GPM	WT. %
H2S	0.0000		
OXYGEN	0.0040		0.0060
CARBON DIOXIDE	0.1120		0.2300
NITROGEN	0.7820		1.0200
METHANE	78.0150		58.2920
ETHANE	11.7130	3.1270	16.4040
PROPANE	5.0910	1.4000	10.4560
I-BUTANE	0.8000	0.2610	2.1660
N-BUTANE	1.7170	0.5400	4.6480
I-PENTANE	0.4490	0.1640	1.5090
N-PENTANE	0.4560	0.1650	1.5320
HEXANE PLUS	0.8610	0.3730	3.7370

TOTAL	100.0000	6.0300	100.0000
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PRESSURE BASE	14.65	14.73	15.025
BTU DRY BASIS	1286.63	1293.66	1319.57
BTU SAT BASIS	1264.12	1271.02	1296.47

REAL GRAVITY 0.7438

H2S: 0 ppm

Z FACTOR 0.9962

SAMPLE TYPE: SPOT

MERCAPTAN PPM: 0

ANALYZED BY: PETER DOUGLAS

CHROMATOGRAPH 9999-12-120721-01

06-20-2018

Production Date	Site Name	Meter Description	Sum of Volume	Notes
5/27/2022	Rana Salada FC Pad E CTB	RS Pad E LP Flare Meter	236	VRU offline
5/28/2022	Rana Salada FC Pad E CTB	RS Pad E LP Flare Meter	231	VRU offline
5/29/2022	Rana Salada FC Pad E CTB	RS Pad E LP Flare Meter	220	VRU offline
5/30/2022	Astrodog Pad S CTB	FB Flare Meter 1	198	from flowback report - Crestwood compressor outage
5/30/2022	Culebra Bluff CTB 3	LP Flare Meter	100	Issues with Crestwood's compressors
5/30/2022	Rana Salada FC Pad E CTB	RS Pad E LP Flare Meter	243	VRU offline
5/30/2022	Rana Salada FC Pad L CTB	LP Flare Meter	75	
5/31/2022	Astrodog Pad S CTB	FB Flare Meter 1	304	from flowback report - Crestwood compressor outage
5/31/2022	Culebra Bluff CTB 3	LP Flare Meter	108	Issues with Crestwood's compressors
5/31/2022	Rana Salada FC Pad E CTB	RS Pad E LP Flare Meter	240	VRU offline
6/1/2022	Astrodog Pad S CTB	FB Flare Meter 1	4,755	from flowback report - Crestwood compressor outage
6/1/2022	Culebra Bluff CTB 3	LP Flare Meter	145	Issues with Crestwood's compressors
6/1/2022	Rana Salada FC Pad E CTB	RS Pad E LP Flare Meter	245	VRU offline
6/1/2022	Rana Salada FC Pad L CTB	LP Flare Meter	213	
6/2/2022	Astrodog Pad S CTB	FB Flare Meter 1	776	from flowback report - Crestwood compressor outage
6/2/2022	Culebra Bluff CTB 3	LP Flare Meter	94	
6/2/2022	Rana Salada FC Pad A CTB	RS Pad A HP Flare	732	
6/2/2022	Rana Salada FC Pad E CTB	RS Pad E HP Flare Meter	753	
6/2/2022	Rana Salada FC Pad E CTB	RS Pad E LP Flare Meter	248	
6/2/2022	Rana Salada FC Pad L CTB	HP Flare Meter	187	
6/2/2022	Rana Salada FC Pad L CTB	LP Flare Meter	79	
6/3/2022	Astrodog Pad S CTB	FB Flare Meter 1	420	from flowback report - Crestwood compressor outage
6/3/2022	Culebra Bluff CTB 3	LP Flare Meter	113	
6/3/2022	Rana Salada FC Pad A CTB	RS Pad A HP Flare	2,267	
6/3/2022	Rana Salada FC Pad A CTB	RS Pad A LP Flare	79	
6/3/2022	Rana Salada FC Pad E CTB	RS Pad E HP Flare Meter	1,109	
6/3/2022	Rana Salada FC Pad E CTB	RS Pad E LP Flare Meter	249	
6/3/2022	Rana Salada FC Pad L CTB	LP Flare Meter	96	
6/4/2022	Culebra Bluff CTB 3	LP Flare Meter	59	
6/4/2022	Rana Salada FC Pad A CTB	RS Pad A HP Flare	595	
6/4/2022	Rana Salada FC Pad A CTB	RS Pad A LP Flare	79	

6/4/2022	Rana Salada FC Pad E CTB	RS Pad E HP Flare Meter	359
6/4/2022	Rana Salada FC Pad E CTB	RS Pad E LP Flare Meter	251
6/4/2022	Rana Salada FC Pad L CTB	LP Flare Meter	106
6/5/2022	Culebra Bluff CTB 3	LP Flare Meter	140
6/5/2022	Rana Salada FC Pad A CTB	RS Pad A HP Flare	280
6/5/2022	Rana Salada FC Pad A CTB	RS Pad A LP Flare	132
6/5/2022	Rana Salada FC Pad E CTB	RS Pad E HP Flare Meter	317
6/5/2022	Rana Salada FC Pad E CTB	RS Pad E LP Flare Meter	262
6/5/2022	Rana Salada FC Pad L CTB	LP Flare Meter	139
6/6/2022	Astrodog Pad S CTB	FB Flare Meter 1	301 from flowback report - Crestwood compressor outage
6/6/2022	Culebra Bluff CTB 3	LP Flare Meter	127
6/6/2022	Rana Salada FC Pad A CTB	RS Pad A HP Flare	1,255
6/6/2022	Rana Salada FC Pad A CTB	RS Pad A LP Flare	92
6/6/2022	Rana Salada FC Pad E CTB	RS Pad E HP Flare Meter	577
6/6/2022	Rana Salada FC Pad E CTB	RS Pad E LP Flare Meter	281
6/6/2022	Rana Salada FC Pad L CTB	LP Flare Meter	131
6/7/2022	Rana Salada FC Pad A CTB	RS Pad A HP Flare	1,129
6/7/2022	Rana Salada FC Pad E CTB	RS Pad E HP Flare Meter	523
6/7/2022	Rana Salada FC Pad E CTB	RS Pad E LP Flare Meter	276
6/8/2022	Rana Salada FC Pad E CTB	RS Pad E HP Flare Meter	209
6/8/2022	Rana Salada FC Pad E CTB	RS Pad E LP Flare Meter	280
6/8/2022	Rana Salada FC Pad L CTB	LP Flare Meter	73

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District IV
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Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

DEFINITIONS

Action 116171

DEFINITIONS

Operator: NOVO OIL & GAS NORTHERN DELAWARE, LLC 1001 West Wilshire Blvd Oklahoma City, OK 73116	OGRID: 372920
	Action Number: 116171
	Action Type: [C-129] Venting and/or Flaring (C-129)

DEFINITIONS

For the sake of brevity and completeness, please allow for the following in all groups of questions and for the rest of this application: • this application's operator, hereinafter "this operator"; • venting and/or flaring, hereinafter "vent or flare"; • any notification or report(s) of the C-129 form family, hereinafter "any C-129 forms"; • the statements in (and/or attached to) this, hereinafter "the statements in this"; • and the past tense will be used in lieu of mixed past/present tense questions and statements.
--

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QUESTIONS

Action 116171

QUESTIONS

Operator: NOVO OIL & GAS NORTHERN DELAWARE, LLC 1001 West Wilshire Blvd Oklahoma City, OK 73116	OGRID: 372920
	Action Number: 116171
	Action Type: [C-129] Venting and/or Flaring (C-129)

QUESTIONS**Prerequisites**

Any messages presented in this section, will prevent submission of this application. Please resolve these issues before continuing with the rest of the questions.

Incident Well	Not answered.
Incident Facility	[fAPP2123650946] RANA SALADA PAD A CTB

Determination of Reporting Requirements

Answer all questions that apply. The Reason(s) statements are calculated based on your answers and may provide additional guidance.

Was this vent or flare caused by an emergency or malfunction	Yes
Did this vent or flare last eight hours or more cumulatively within any 24-hour period from a single event	Yes
Is this considered a submission for a vent or flare event	Yes, major venting and/or flaring of natural gas.

An operator shall file a form C-141 instead of a form C-129 for a release that, includes liquid during venting and/or flaring that is or may be a major or minor release under 19.15.29.7 NMAC.

Was there at least 50 MCF of natural gas vented and/or flared during this event	Yes
Did this vent or flare result in the release of ANY liquids (not fully and/or completely flared) that reached (or has a chance of reaching) the ground, a surface, a watercourse, or otherwise, with reasonable probability, endanger public health, the environment or fresh water	No
Was the vent or flare within an incorporated municipal boundary or withing 300 feet from an occupied permanent residence, school, hospital, institution or church in existence	No

Equipment Involved

Primary Equipment Involved	Not answered.
Additional details for Equipment Involved. Please specify	Not answered.

Representative Compositional Analysis of Vented or Flared Natural Gas

Please provide the mole percent for the percentage questions in this group.

Methane (CH4) percentage	77
Nitrogen (N2) percentage, if greater than one percent	0
Hydrogen Sulfide (H2S) PPM, rounded up	0
Carbon Dioxide (CO2) percentage, if greater than one percent	0
Oxygen (O2) percentage, if greater than one percent	0

If you are venting and/or flaring because of Pipeline Specification, please provide the required specifications for each gas.

Methane (CH4) percentage quality requirement	Not answered.
Nitrogen (N2) percentage quality requirement	Not answered.
Hydrogen Sulfide (H2S) PPM quality requirement	Not answered.
Carbon Dioxide (CO2) percentage quality requirement	Not answered.
Oxygen (O2) percentage quality requirement	Not answered.

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QUESTIONS, Page 2

Action 116171

QUESTIONS (continued)

Operator: NOVO OIL & GAS NORTHERN DELAWARE, LLC 1001 West Wilshire Blvd Oklahoma City, OK 73116	OGRID: 372920
	Action Number: 116171
	Action Type: [C-129] Venting and/or Flaring (C-129)

QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	06/04/2022
Time vent or flare was discovered or commenced	08:00 AM
Time vent or flare was terminated	08:00 AM
Cumulative hours during this event	24

Measured or Estimated Volume of Vented or Flared Natural Gas	
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Cause: Repair and Maintenance Other (Specify) Natural Gas Flared Released: 595 Mcf Recovered: 0 Mcf Lost: 595 Mcf
Other Released Details	Not answered.
Additional details for Measured or Estimated Volume(s). Please specify	Not answered.
Is this a gas only submission (i.e. only significant Mcf values reported)	Yes, according to supplied volumes this appears to be a "gas only" report.

Venting or Flaring Resulting from Downstream Activity	
Was this vent or flare a result of downstream activity	No
Was notification of downstream activity received by this operator	Not answered.
Downstream OGRID that should have notified this operator	Not answered.
Date notified of downstream activity requiring this vent or flare	Not answered.
Time notified of downstream activity requiring this vent or flare	Not answered.

Steps and Actions to Prevent Waste	
For this event, this operator could not have reasonably anticipated the current event and it was beyond this operator's control.	True
Please explain reason for why this event was beyond this operator's control	COMPRESSOR MAINTENANCE OUTSIDE TEMP ISSUES
Steps taken to limit the duration and magnitude of vent or flare	MONITORED
Corrective actions taken to eliminate the cause and reoccurrence of vent or flare	WAIT ON REPAIR

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ACKNOWLEDGMENTS

Action 116171

ACKNOWLEDGMENTS

Operator: NOVO OIL & GAS NORTHERN DELAWARE, LLC 1001 West Wilshire Blvd Oklahoma City, OK 73116	OGRID: 372920
	Action Number: 116171
	Action Type: [C-129] Venting and/or Flaring (C-129)

ACKNOWLEDGMENTS

☒	I acknowledge that I am authorized to submit a <i>Venting and/or Flaring</i> (C-129) report on behalf of this operator and understand that this report can be a complete C-129 submission per 19.15.27.8 and 19.15.28.8 NMAC.
☒	I acknowledge that upon submitting this application, I will be creating a new incident file (assigned to this operator) to track any C-129 forms, pursuant to 19.15.27.7 and 19.15.28.8 NMAC and understand that this submission meets the notification requirements of Paragraph (1) of Subsection G and F respectively.
☒	I hereby certify the statements in this report are true and correct to the best of my knowledge and acknowledge that any false statement may be subject to civil and criminal penalties under the Oil and Gas Act.
☒	I acknowledge that the acceptance of any C-129 forms by the OCD does not relieve this operator of liability should their operations have failed to adequately investigate, report, and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment.
☒	I acknowledge that OCD acceptance of any C-129 forms does not relieve this operator of responsibility for compliance with any other applicable federal, state, or local laws and/or regulations.

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CONDITIONS

Action 116171

CONDITIONS

Operator: NOVO OIL & GAS NORTHERN DELAWARE, LLC 1001 West Wilshire Blvd Oklahoma City, OK 73116	OGRID: 372920
	Action Number: 116171
	Action Type: [C-129] Venting and/or Flaring (C-129)

CONDITIONS

Created By	Condition	Condition Date
bwheaton	If the information provided in this report requires an amendment, submit a [C-129] Amend Venting and/or Flaring Incident (C-129A), utilizing your incident number from this event.	6/13/2022