



2030 Afton Place
Farmington, NM 87401
(505) 325-6622

Analysis No: EN170204
Cust No: 25400-11825

Well/Lease Information

Customer Name: ENERVEST
Well Name: SOUTHERN UNION #1B; CSG
County/State: SAN JUAN NM
Location:
Field:
Formation:
Cust. Stn. No.: API 3004531129

Source: CASING
Well Flowing: Y
Pressure: 75 PSIG
Flow Temp: DEG. F
Ambient Temp: 70 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Date Sampled: 10/25/2017
Sample Time: 1.20 PM
Sampled By: LEROY MARTINEZ
Sampled by (CO): ENERVEST

OIL CONS. DIV DIST. 3
OCT 30 2017

Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.4315	0.4258	0.0480	0.00	0.0042
CO2	1.7136	1.6910	0.2940	0.00	0.0260
Methane	77.5127	76.4915	13.1900	782.88	0.4293
Ethane	10.7042	10.5632	2.8730	189.43	0.1111
Propane	4.8874	4.8230	1.3520	122.97	0.0744
Iso-Butane	0.8051	0.7945	0.2640	26.18	0.0162
N-Butane	1.4579	1.4387	0.4610	47.56	0.0293
I-Pentane	0.5435	0.5363	0.2000	21.74	0.0135
N-Pentane	0.4846	0.4782	0.1760	19.43	0.0121
Hexane Plus	1.4595	1.4403	0.6530	76.93	0.0483
Total	100.0000	98.6825	19.5110	1287.13	0.7644

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.004
BTU/CU.FT IDEAL: 1290.1
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1295.3
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1272.8
DRY BTU @ 15.025: 1321.2
REAL SPECIFIC GRAVITY: 0.7672

CYLINDER #: 4203
CYLINDER PRESSURE: 78 PSIG
DATE RUN: 10/26/17 1:20 PM
ANALYSIS RUN BY: CAMERON MANGAN

GPM, BTU, and SPG calculations as shown above are based on current GPA constants.

GPA Standard: GPA-2261

GC: Danalyzer Model 500

Last Cal/Verify: 10/26/2017

GC Method: C6+ Gas



2030 Afton Place, Farmington, NM 87401 - (505) 325-6622

24 hr. Rush
10 PSIG Precharge

78#

C6+ ☒ C9+ ☐ C12+ ☐ C12+ BTEX ☐ Helium ☐

Other _____ Date 10/25/17

Sampled By:(Co.) EverVest Time 1:30 ☐ AM ☒ PM

Sampled by:(Person) Leroy Martinez Well Flowing: ☒ Yes ☐ No

Company: EverVest Heat Trace: ☐ Yes ☐ No

Well Name: Southern Union #1B Flow Pressure (PSIG): 75.3

Location: _____ Flow Temp (°F): N/A

County/State: SAN JUAN NM Ambient Temp (°F): 70°

Formation: _____ Flow Rate (MCF/D): N/A

Source: ☐ Meter Run ☐ Tubing ☒ Casing ☐ Bradenhead ☐ Other _____

Sample Type: ☒ Spot ☐ Composite Sample Method: ☒ Purge & Fill ☐ Other _____

Meter Number: _____ Cylinder Number: 4203

Contact: Leroy Martinez 793-3217

Remarks: API # 3004531129



2030 Afton Place
Farmington, NM 87401
(505) 325-6622

Analysis No: EN170205
Cust No: 25400-11305

Well/Lease Information

Customer Name: ENERVEST
Well Name: SOUTHERN UNION #1B; INT
County/State: SAN JUAN NM
Location:
Field:
Formation:
Cust. Stn. No.: API 3004531129

OIL CONS. DIV DIST. 3

OCT 30 2017

Source: INTERMEDIATE
Well Flowing: Y
Pressure: 1 PSIG
Flow Temp: DEG. F
Ambient Temp: 69 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Date Sampled: 10/25/2017
Sample Time: 1.10 PM
Sampled By: LEROY MARTINEZ
Sampled by (CO): ENERVEST

Remarks: PRESSURED WITH HELIUM TO 30LBS.

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	27.0188	8.8333	2.9800	0.00	0.2613
CO2	0.0413	0.0135	0.0070	0.00	0.0006
Methane	59.0065	19.2911	10.0270	595.97	0.3268
Ethane	6.2004	2.0271	1.6620	109.73	0.0644
Propane	4.1262	1.3490	1.1390	103.82	0.0628
Iso-Butane	0.7824	0.2558	0.2570	25.44	0.0157
N-Butane	0.9277	0.3033	0.2930	30.26	0.0186
I-Pentane	0.3147	0.1029	0.1150	12.59	0.0078
N-Pentane	0.2346	0.0767	0.0850	9.40	0.0058
Hexane Plus	1.3474	0.4405	0.6020	71.02	0.0446
Total	100.0000	32.6932	17.1670	958.24	0.8086

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.0026
BTU/CU.FT IDEAL: 960.5
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 963.0
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 946.2
DRY BTU @ 15.025: 982.3
REAL SPECIFIC GRAVITY: 0.8104

CYLINDER #: 4001
CYLINDER PRESSURE: PSIG
DATE RUN: 10/26/17 1:10 PM
ANALYSIS RUN BY: CAMERON MANGAN

GPM, BTU, and SPG calculations as shown above are based on current GPA constants.

GPA Standard: GPA-2261

GC: Danalyzer Model 500

Last Cal/Verify: 10/26/2017

GC Method: C6+ Gas



2030 Afton Place, Farmington, NM 87401 H-5061325-0120 50#

****10 PSIG Precharge****

C6+ ☒ C9+ ☐ C12+ ☐ C12+ BTEX ☐ Helium ☐

Other _____

Date 10/25/17

Time 1:10 ☐ AM ☒ PM

Sampled By: (Co.) EverVest

Sampled by: (Person) Leroy Martinez

Well Flowing: ☒ Yes ☐ No

Company: EverVest

Heat Trace: ☐ Yes ☐ No

Well Name: Southern Union 1B

Flow Pressure (PSIG): 0.7

Location: _____

Flow Temp (°F): n/a

County/State: SAN JUAN NM

Ambient Temp (°F): 69°

Formation: _____

Flow Rate (MCF/D): n/a

Source: ☐ Meter Run ☐ Tubing ☐ Casing ☐ Bradenhead ☒ Other Intermediate

Sample Type: ☒ Spot ☐ Composite Sample Method: ☒ Purge & Fill ☐ Other _____

Meter Number: _____

Cylinder Number: 4001

Contact: Leroy Martinez 793-3217

Remarks: API #3004531129



ENERVEST
WELL ANALYSIS COMPARISON

Lease: SOUTHERN UNION #1B; INT
Stn. No.: API 3004531129
Mtr. No.:

INTERMEDIATE

10/26/2017
25400-11305

Smpl Date:	10/25/2017	10/03/2014
Test Date:	10/26/2017	10/03/2014
Run No:	EN170205	EN140177
Nitrogen:	27.0188	0.2820
CO2:	0.0413	0.0080
Methane:	59.0065	55.2334
Ethane:	6.2004	13.0219
Propane:	4.1262	12.1969
I-Butane:	0.7824	3.3020
N-Butane:	0.9277	5.5049
I-Pentane:	0.3147	3.8790
N-Pentane:	0.2346	3.2650
Hexane+:	1.3474	3.3070
BTU:	963.0	1864.0
GPM:	17.1670	23.3390
SPG:	0.8104	1.1035