



Schwerdtfeger ALS 8
30-045-07025
Casing Sample

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

Analysis No: SO180190
Cust No: 15950-11390

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: SCHWERTDFEGER A LS 8; CSG
County/State: SAN JUAN NM
Location:
Field:
Formation: PC
Cust. Stn. No.: 3004507025

Source: CASING
Well Flowing: Y
Pressure: 96 PSIG
Flow Temp: DEG. F
Ambient Temp: 86 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 08/13/2018
Sample Time: 3.35 PM
Sampled By: FARRELL C.
Sampled by (CO): PESCO

NMOC

FEB 13 2019

DISTRICT III

Heat Trace: N
Remarks:

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1613	0.1593	0.0180	0.00	0.0016
CO2	0.5458	0.5390	0.0930	0.00	0.0083
Methane	87.6013	86.5131	14.8920	884.77	0.4852
Ethane	6.2614	6.1836	1.6790	110.81	0.0650
Propane	2.9055	2.8694	0.8030	73.11	0.0442
Iso-Butane	0.5522	0.5453	0.1810	17.96	0.0111
N-Butane	0.7961	0.7862	0.2520	25.97	0.0160
I-Pentane	0.2903	0.2867	0.1060	11.61	0.0072
N-Pentane	0.2144	0.2117	0.0780	8.59	0.0053
Hexane Plus	0.6717	0.6634	0.3000	35.41	0.0222
Total	100.0000	98.7577	18.4020	1168.23	0.6662

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.003
BTU/CU.FT IDEAL: 1170.9
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1174.5
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1154.1
DRY BTU @ 15.025: 1198.0
REAL SPECIFIC GRAVITY: 0.6679

CYLINDER #: 019
CYLINDER PRESSURE: 90 PSIG
ANALYSIS DATE: 09/11/2018
ANALYSIS TIME: 10:01:49 AM
ANALYSIS RUN BY: RICHARD WILSON

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

GPA Standard: GPA-2261

GC: Danalyzer Model 500

GC Method: C6+ Gas

Last Cal/Verify: 09/17/2018



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: SCHWERTFEGER A LS 8; CSG
Stn. No.: 3004507025
Mtr. No.:

CASING
PC

09/17/2018
15950-11390

Smpl Date: 08/13/2018
Test Date: 09/11/2018
Run No: SO180190

Nitrogen: 0.1613
CO2: 0.5458
Methane: 87.6013
Ethane: 6.2614
Propane: 2.9055
I-Butane: 0.5522
N-Butane: 0.7961
I-Pentane: 0.2903
N-Pentane: 0.2144
Hexane+: 0.6717

BTU: 1174.5
GPM: 18.4020
SPG: 0.6679



Schwerdtfeger A LS 8
30-045-07025
Tubing Sample

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

Analysis No: SO180191
Cust No: 15950-11400

Well/Lease Information

Customer Name: BP - SOUTH BHD PROJECT
Well Name: SCHWERTDFEGER A LS 8; TBG
County/State: SAN JUAN NM
Location:
Field:
Formation: PC
Cust. Stn. No.: 300450025

Source: TUBING
Well Flowing: Y
Pressure: 96 PSIG
Flow Temp: DEG. F
Ambient Temp: 86 DEG. F
Flow Rate: MCF/D
Sample Method: Purge & Fill
Sample Date: 08/13/2018
Sample Time: 3.40 PM
Sampled By: FARRELL C.
Sampled by (CO): PESCO

Heat Trace: N
Remarks:

NMOC
FEB 13 2019
DISTRICT III

Analysis

Component::	Mole%:	Unnormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1610	0.1592	0.0180	0.00	0.0016
CO2	0.5632	0.5570	0.0960	0.00	0.0086
Methane	87.4765	86.5108	14.8710	883.51	0.4845
Ethane	6.3151	6.2454	1.6940	111.76	0.0656
Propane	2.9329	2.9005	0.8100	73.79	0.0447
Iso-Butane	0.5569	0.5508	0.1830	18.11	0.0112
N-Butane	0.8102	0.8013	0.2560	26.43	0.0163
I-Pentane	0.2964	0.2931	0.1090	11.86	0.0074
N-Pentane	0.2199	0.2175	0.0800	8.82	0.0055
Hexane Plus	0.6679	0.6605	0.2990	35.21	0.0221
Total	100.0000	98.8961	18.4160	1169.49	0.6673

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z): 1.003
BTU/CU.FT IDEAL: 1172.2
BTU/CU.FT (DRY) CORRECTED FOR (1/Z): 1175.7
BTU/CU.FT (WET) CORRECTED FOR (1/Z): 1155.2
DRY BTU @ 15.025: 1199.2
REAL SPECIFIC GRAVITY: 0.669

CYLINDER #: 0115
CYLINDER PRESSURE: 94 PSIG
ANALYSIS DATE: 09/11/2018
ANALYSIS TIME: 09:30:00 AM
ANALYSIS RUN BY: RICHARD WILSON

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

GPA Standard: GPA-2261

GC: Danalyzer Model 500

GC Method: C6+ Gas

Last Cal/Verify: 09/17/2018



BP - SOUTH BHD PROJECT
WELL ANALYSIS COMPARISON

Lease: SCHWERTDFEGER A LS 8; TBG
Stn. No.: 300450025
Mtr. No.:

TUBING
PC

09/17/2018
15950-11400

Smpl Date: 08/13/2018
Test Date: 09/11/2018
Run No: SO180191

Nitrogen: 0.1610
CO2: 0.5632
Methane: 87.4765
Ethane: 6.3151
Propane: 2.9329
I-Butane: 0.5569
N-Butane: 0.8102
I-Pentane: 0.2964
N-Pentane: 0.2199
Hexane+: 0.6679

BTU: 1175.7
GPM: 18.4160
SPG: 0.6690