30-45-23085

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

Analysis No: GW170036
Cust No: 33050-10240

Well/Lease Information

Customer Name:	GREAT WESTERN DRILLING	Source:	METER RUN
Well Name:	J.E. DECKER 2A BHD	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	39 PSIG
Location:		Flow Temp:	DEG. F
Field:		Ambient Temp:	63 DEG. F
Formation:	MESA VERDE	Flow Rate:	MCF/D
Cust. Stn. No.:		Sample Method:	Purge & Fill
		Date Sampled:	10/23/2017
		Sample Time:	12.00 PM
		Sampled By:	CULLAN
		Sampled by (CO):	GWDC

OIL CONS. DIV DIST. 3
NOV 07 2017

Remarks:

Analysis

Component::	Mole%:	Unormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.9741	0.9515	0.1070	0.00	0.0094
CO2	0.7882	0.7699	0.1350	0.00	0.0120
Methane	87.4559	85.4297	14.8640	883.30	0.4844
Ethane	6.3550	6.2078	1.7040	112.46	0.0660
Propane	2.4524	2.3956	0.6770	61.70	0.0373
Iso-Butane	0.4739	0.4629	0.1550	15.41	0.0095
N-Butane	0.6025	0.5885	0.1900	19.66	0.0121
I-Pentane	0.2167	0.2117	0.0790	8.67	0.0054
N-Pentane	0.1576	0.1539	0.0570	6.32	0.0039
Hexane Plus	0.5237	0.5116	0.2340	27.60	0.0173
Total	100.0000	97.6831	18.2020	1135.13	0.6574

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY
**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBLITY FACTOR (1/Z):	1.0028	CYLINDER #:	4155
BTU/CU.FT IDEAL:	1137.8	CYLINDER PRESSURE:	39 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1141.0	DATE RUN:	10/30/17 12:00 PM
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1121.1	ANALYSIS RUN BY:	RICHARD WILSON
DRY BTU @ 15.025:	1163.9		
REAL SPECIFIC GRAVITY:	0.659		

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: 10/30/2017**
GC Method: C6+ Gas

GAS ANALYSIS SERVICE

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

Analysis No: GW170048
Cust No: 33050-10385

Well/Lease Information

Customer Name:	GREAT WESTERN DRILLING	Source:	TUBING
Well Name:	J.E. DECKER 2A; TBG	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	130 PSIG
Location:		Flow Temp:	DEG. F
Field:		Ambient Temp:	57 DEG. F
Formation:	BMV	Flow Rate:	MCF/D
Cust. Stn. No.:	API 30-045-23085	Sample Method:	Purge & Fill
		Date Sampled:	10/25/2017
		Sample Time:	10.25 AM
		Sampled By:	CULLAN
		Sampled by (CO):	GWDC

OIL CONS. DIV DIST. 3
NOV 07 2017

Remarks:

Analysis

Component::	Mole%:	Unormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1061	0.1047	0.0120	0.00	0.0010
CO2	1.5595	1.5391	0.2670	0.00	0.0237
Methane	85.6357	84.5162	14.5590	864.92	0.4743
Ethane	7.2963	7.2009	1.9570	129.12	0.0758
Propane	2.9063	2.8683	0.8030	73.13	0.0442
Iso-Butane	0.5875	0.5798	0.1930	19.10	0.0118
N-Butane	0.7537	0.7438	0.2380	24.59	0.0151
I-Pentane	0.2801	0.2764	0.1030	11.21	0.0070
N-Pentane	0.2122	0.2094	0.0770	8.51	0.0053
Hexane Plus	0.6626	0.6539	0.2960	34.93	0.0219
Total	100.0000	98.6925	18.5050	1165.50	0.6802

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY
**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBLITY FACTOR (1/Z):	1.0031	CYLINDER #:	6141
BTU/CU.FT IDEAL:	1168.2	CYLINDER PRESSURE:	139 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1171.8	DATE RUN:	10/31/17 12:00 AM
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1151.4	ANALYSIS RUN BY:	PATRICIA KING
DRY BTU @ 15.025:	1195.3		
REAL SPECIFIC GRAVITY:	0.682		

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: 11/01/2017**
GC Method: C6+ Gas

GAS ANALYSIS SERVICE

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

Analysis No: GW170047
Cust No: 33050-10370

Well/Lease Information

Customer Name:	GREAT WESTERN DRILLING	Source:	CASING
Well Name:	J.E. DECKER 2A; CSG	Well Flowing:	Y
County/State:	SAN JUAN NM	Pressure:	130 PSIG
Location:		Flow Temp:	DEG. F
Field:		Ambient Temp:	57 DEG. F
Formation:	BMV	Flow Rate:	MCF/D
Cust. Stn. No.:	API 30-045-23085	Sample Method:	Purge & Fill
		Date Sampled:	10/25/2017
		Sample Time:	10.15 AM
		Sampled By:	CULLAN
		Sampled by (CO):	GWDC

OIL CONS. DIV DIST. 3
NOV 07 2017

Remarks:

Analysis

Component::	Mole%:	Unormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1132	0.1114	0.0120	0.00	0.0011
CO2	1.4260	1.4032	0.2440	0.00	0.0217
Methane	85.5171	84.1485	14.5390	863.72	0.4737
Ethane	7.4949	7.3750	2.0100	132.64	0.0778
Propane	2.9601	2.9127	0.8180	74.48	0.0451
Iso-Butane	0.5852	0.5758	0.1920	19.03	0.0117
N-Butane	0.7508	0.7388	0.2370	24.49	0.0151
I-Pentane	0.2798	0.2753	0.1030	11.19	0.0070
N-Pentane	0.2102	0.2068	0.0760	8.43	0.0052
Hexane Plus	0.6627	0.6521	0.2960	34.93	0.0219
Total	100.0000	98.3996	18.5270	1168.91	0.6803

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY
**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBLITY FACTOR (1/Z):	1.0031	CYLINDER #:	6246
BTU/CU.FT IDEAL:	1171.6	CYLINDER PRESSURE:	140 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1175.3	DATE RUN:	10/31/17 12:00 AM
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1154.8	ANALYSIS RUN BY:	PATRICIA KING
DRY BTU @ 15.025:	1198.8		
REAL SPECIFIC GRAVITY:	0.6821		

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: 11/01/2017**
GC Method: C6+ Gas