



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE
1000 RIO BRAZOS ROAD
AZTEC NM 87410
(505) 334-6178 FAX: (505) 334-6170
[http://emnr.state.nm.us/ocd/District III/3distric.htm](http://emnr.state.nm.us/ocd/District%20III/3distric.htm)

BRADENHEAD TEST REPORT

(submit 1 copy to above address)

Date of Test 4-3-18 Operator ENDURING RESOURCES API #30-0 45-30514

Property Name SLANG CANYON Well No. 32-1C Location: Unit Section 32 Township 30N Range 10W

Well Status (Shut-In or Producing) Initial PSI: Tubing 130 Intermediate N/A Casing 140 Bradenhead 2

OPEN BRADENHEAD AND INTERMEDIATE TO ATMOSPHERE INDIVIDUALLY FOR 15 MINUTES EACH

Testing	PRESSURE			INTERM	
	BrH	Bradenhead Int	Csg	Int	Csg
TIME					
5 min	<u>0</u>		<u>140</u>		
10 min	<u>0</u>		<u>140</u>		
15 min	<u>0</u>		<u>140</u>		
20 min					
25 min					
30 min					

	FLOW CHARACTERISTICS	
	BRADENHEAD	INTERMEDIATE
Steady Flow	<u>✓</u>	
Surges		
Down to Nothing	<u>✓</u>	
Nothing		
Gas	<u>✓</u>	
Gas & Water		
Water		

If bradenhead flowed water, check all of the descriptions that apply below:

CLEAR FRESH SALTY SULFUR BLACK

5 MINUTE SHUT-IN PRESSURE

BRADENHEAD 1.5

INTERMEDIATE N/A

REMARKS:

By [Signature]

Witness _____

AIR QUALITY SPECIALIST
(Position)

E-mail address steve@enduringresources.com

NMOC

APR 11 2018

DISTRICT III

NMOC

Diablo Analytical BTU Report

GPA 2145-03 Analysis

APR 11 2018

DISTRICT III

Sample Information

Sample Information	
Sample Name	SlaneCayon 32-1C Casing
Station Number	98481
Taken By	Alpine Analysis LLC
Operator	Travis Tapp
Method Name	StandardNatGas.met
Injection Date	2018-03-19 13:06:11
Report Date	2018-03-19 13:10:14
EZReporter Configuration File	default Standard Sample.cfgx
Source Data File	2018-03-19 13-05-40 (GMT -06-00)SlaneCayon 32-1C Casing
EZReporter Data File	SlaneCayon 32-1C Casing-20180319-131014.ezrx
Data Source	Agilent EZChrom Connector

30-045-30514

Component Results

Component Name	Ret. Time	Peak Area	Norm%	Gross HV (Dry) (BTU / Ideal cu.ft.)	Relative Gas Density (Dry)	GPM (Dry) (Gal. / 1000 cu.ft.)
Nitrogen	0.320	233578.0	0.32680	0.0	0.00316	0.036
Methane	0.325	39510883.0	80.27974	812.7	0.44467	13.652
Carbon Dioxide	0.378	344474.0	0.48710	0.0	0.00740	0.083
Ethane	0.418	7652923.0	10.26264	182.0	0.10655	2.753
Hydrogen Sulfide	0.601	0.0	0.00000	0.0	0.00000	0.000
Propane	0.524	10853862.0	5.33539	134.6	0.08123	1.474
i-Butane	0.573	2535913.0	1.07053	34.9	0.02148	0.351
n-Butane	0.607	2829979.0	1.17125	38.3	0.02350	0.370
i-Pentane	0.712	1056314.0	0.39308	15.8	0.00979	0.144
n-Pentane	0.755	782733.0	0.27989	11.2	0.00697	0.102
Hexanes Plus	0.000	1341515.0	0.39358	0.0	0.00000	0.000
Water	0.000	0.0	0.00000	0.0	0.00000	0.000
Total:			100.00000	1229.5	0.70476	18.967

Results Summary

Result	Dry	Sat. (Base)
Total Raw Mole% (Dry)	100.18380	
Pressure Base (psia)	14.730	
Temperature Base	60.0	
Water Mole%	-	1.74067
Gross Heating Value (BTU / Ideal cu.ft.)	1229.5	1208.1
Gross Heating Value (BTU / Real cu.ft.)	1233.7	1212.7
Relative Density (G), Real	0.7068	0.7057
Compressibility (Z) Factor	0.9966	0.9962
Total GPM	18.967	18.744

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DISTRICT III

Diablo Analytical BTU Report

GPA 2145-03 Analysis

Sample Information

	Sample Information
Sample Name	SlaneCayon 32-1C Tubing
Station Number	98481
Taken By	Alpine Analysis LLC
Operator	Travis Tapp
Method Name	StandardNatGas.met
Injection Date	2018-03-19 13:17:54
Report Date	2018-03-19 13:21:45
EZReporter Configuration File	default Standard Sample.cfgx
Source Data File	2018-03-19 13-17-43 (GMT -06-00)SlaneCayon 32-1C Tubing
EZReporter Data File	SlaneCayon 32-1C Tubing-20180319-132145.ezrx
Data Source	Agilent EZChrom Connector

Component Results

Component Name	Ret. Time	Peak Area	Norm%	Gross HV (Dry) (BTU / Ideal cu.ft.)	Relative Gas Density (Dry)	GPM (Dry) (Gal. / 1000 cu.ft.)
Nitrogen	0.320	194733.0	0.27166	0.0	0.00263	0.030
Methane	0.325	39790067.0	80.62785	816.2	0.44660	13.711
Carbon Dioxide	0.378	418998.0	0.59090	0.0	0.00898	0.101
Ethane	0.418	7617133.0	10.18694	180.7	0.10576	2.733
Hydrogen Sulfide	0.601	0.0	0.00000	0.0	0.00000	0.000
Propane	0.525	10554604.0	5.17420	130.5	0.07878	1.430
i-Butane	0.574	2141192.0	0.90149	29.4	0.01809	0.296
n-Butane	0.607	3034797.0	1.25259	41.0	0.02514	0.396
i-Pentane	0.712	1029411.0	0.38196	15.3	0.00952	0.140
n-Pentane	0.756	818657.0	0.29197	11.7	0.00727	0.106
Hexanes Plus	0.000	1095318.0	0.32044	0.0	0.00000	0.000
Water	0.000	0.0	0.00000	0.0	0.00000	0.000
Total:			100.00000	1224.8	0.70276	18.944

Results Summary

Result	Dry	Sat. (Base)
Total Raw Mole% (Dry)	100.45610	
Pressure Base (psia)	14.730	
Temperature Base	60.0	
Water Mole%	-	1.74067
Gross Heating Value (BTU / Ideal cu.ft.)	1224.8	1203.5
Gross Heating Value (BTU / Real cu.ft.)	1228.9	1208.0
Relative Density (G), Real	0.7048	0.7037
Compressibility (Z) Factor	0.9966	0.9963
Total GPM	18.944	18.721

Diablo Analytical BTU Report

GPA 2145-03 Analysis

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Sample Information

DISTRICT III

	Sample Information
Sample Name	SlaneCayon32-1C BradenHead
Station Number	98481
Taken By	Alpine Analysis LLC
Operator	Travis Tapp
Method Name	StandardNatGas.met
Injection Date	2018-03-19 13:33:59
Report Date	2018-03-19 13:38:05
EZReporter Configuration File	default Standard Sample.cfgx
Source Data File	2018-03-19 13-33-48 (GMT -06-00)SlaneCayon32-1C BradenHead
EZReporter Data File	SlaneCayon32-1C BradenHead-20180319-133805.ezrx
Data Source	Agilent EZChrom Connector

Component Results

Component Name	Ret. Time	Peak Area	Norm%	Gross HV (Dry) (BTU / Ideal cu.ft.)	Relative Gas Density (Dry)	GPM (Dry) (Gal. / 1000 cu.ft.)
Nitrogen	0.320	652176.0	0.91955	0.0	0.00889	0.101
Methane	0.325	43712146.0	89.50926	906.1	0.49579	15.209
Carbon Dioxide	0.377	0.0	0.00000	0.0	0.00000	0.000
Ethane	0.422	4664535.0	6.30403	111.8	0.06545	1.690
Hydrogen Sulfide	0.601	0.0	0.00000	0.0	0.00000	0.000
Propane	0.527	3866462.0	1.91544	48.3	0.02916	0.529
i-Butane	0.574	1032993.0	0.43950	14.3	0.00882	0.144
n-Butane	0.608	897176.0	0.37422	12.2	0.00751	0.118
i-Pentane	0.712	475283.0	0.17826	7.1	0.00444	0.065
n-Pentane	0.756	213344.0	0.07686	3.1	0.00191	0.028
Hexanes Plus	0.000	956770.0	0.28288	0.0	0.00000	0.000
Water	0.000	0.0	0.00000	0.0	0.00000	0.000
Total:			100.00000	1103.1	0.62198	17.885

Results Summary

Result	Dry	Sat. (Base)
Total Raw Mole% (Dry)	99.40780	
Pressure Base (psia)	14.730	
Temperature Base	60.0	
Water Mole%	-	1.74067
Gross Heating Value (BTU / Ideal cu.ft.)	1103.1	1083.9
Gross Heating Value (BTU / Real cu.ft.)	1105.9	1087.0
Relative Density (G), Real	0.6233	0.6235
Compressibility (Z) Factor	0.9975	0.9971
Total GPM	17.885	17.680