

Attachment to the Site Security Diagram - South Blanco Federal 23-3, 4 Tank Battery

Epic Energy, LLC.

South Blanco Federal 23-3, 4 Tank Battery

Lease# NM-20304

Quarter: SE of SW

Section: S23 T24N R8W 36.295073° -107.653431°

Elevation: 6871

San Juan County, New Mexico

Attachment to the Site Security Diagram - South Blanco Federal 23-3, 4 Tank Battery

Production phase:

All drain valves (D1), and (D2) sealed closed.

All sales valves (S1), and (S2) sealed closed.

Fill Valve (F1), or (F2) open

Sales phase:

The tank from which the sales are being made will be isolated by sealing closed the drain valve (DV1) or (DV2) and fill valve (FV1) or (FV2) and removing and recording the seal from (SV1) or (SV2) during the sale of the specified tank.

The sales valve will be sealed and recorded immediately following the sale.

Drain phase:

The tank from which the drain is being made will be isolated by sealing closed the sales valve and fill valve during the water drain.

Fuelgas Usage Calculations

Pump Unit Engine Table

Engine Type

C46 ARROW

C-66 ARROW

C-96 ARROW

KUBOTA 1600

KUBOTA 3200

KOHLER 27 hp

KOHLER 18 hp

AJAX EA15

KOHLER - 27hp

Electric

None

None

KUBOTA (DG-972-E2)

AJAX DP60 (9 1/2 x 12)

AJAX E42 (8 1/2 x 10)

AJAX EA30 (7 1/2 x 8)

AJAX EA22 (6 1/2 x 8)

Electric

Lease Name: Epic Energy, LLC.

South Blanco Federal 23-3, 4 Tank Battery

Lease# NM-20304 Quarter: SE of SW

Section: S23 T24N R8W

Elevation: 6871 San Juan County, New Mexico

Fuel gas Calculations: BTU / scf % Used HV from Gas Analysis 1403 10 All gas used split between the wells attached to the battery Elevation 6871 Pilot 100

٧	e	s	s	e	ı	s

	Burner BTU Rating	mscf/day	Pilot BTU Rating	mscf/day	Total
Separator	250000	0.4	6000	0.10	0.53
Tank #1		0.0		0.00	0.00
Tank #2		0.0		0.00	0.00
Tank #3		0.0		0.00	0.00
Tank #4		0.0		0.00	0.00
Tank #5		0.0		0.00	0.00
			-		-

Total MSCF/DAY 0.43 0.10 0.53

Horsepower Engine Table

D Engine Type HP (100% Load) HP (80% Load) Fuel Consumption GS-10 - 80hp (Estimated) Twin Stars BOSS GM3.0L 32 26 8500 Gemni G26 26 21 8000

MCF/D USAGE

2.5

3.0

0

3.81

2.5

3

3.6

2

2.6

0

from Arrow)

from Arrow)

(from Arrow)

HP

8.8

12.3

18.8

NA

16

32

25

25

16

60

42

30

15

22

NA

(Estimated) Twin Stars 5.9 Cummins 49 39 8725 Twin Stars 5.9 Cummins 84 67 8056 Twin Stars 5.9E Cummins 84 67 8422 GS12 (8.3 nat asp cummins) 118 94 8553 GS17 (8.3 Turbo Cummins) 175 140 7560 (Estimated) GS24 (855 Turbo) 281 8617 (Estimated) 496 and 454 Chevy - 110 110 88 8500 (Estimated) 460 Ford 85 68 8000 300 6 cyl Ford 65 52 8650 8.3 Cummins (natural aspirated) 118 94 8553 8.3E Cummins (natural aspirated) 118 94 8933 175 140 7560

8.3 Cummins (turbo charged) 855 Cummins (turbo) 281 225 8617 KTA19GC 420 336 7961 KTA19GC-SLB 420 336 8172 FLUID COMP GM-350 3304 CATERPILLAR 80 64 8319 95 7778 VRG-330 ARROW/WAKESHAU 68 54 8038 KAWASAKI(Poquito) - 750 15 8350 12 KUBOTA (DG-972-E2) 23.6 19 8000 VRG-220 ARROW/WAKESHAU 52 42 8250 KOHLER - 18hp 14 8500

27

REFERENCES:		
De-Rating for Elevation Change	2.44%	Turbo Charged Engines
(every 1000' above 2000' elevation)	3.66%	Naturally Aspirated
6000 BTU is avg value to use for Pilot Calc	ulations for Vess	els
6000 BTU is avg value to use for Pilot Calc	ulations for Vess	els
6000 BTU is avg value to use for Pilot Calci		
	ome kind of manua	l data entry, either

Engines

Compressor Engine	None
Pump Unit Engine	None
HP Rating @ 80% Load (D)	
Fuel Consumption (E)	0
Pump Jack mcf/day (B)	0.0
De-Rating % for Elevation	0.0366
De-Rated HP @ 80% Load	0.0

Total MSCF/DAY	0.00

Other Use

(Estimated)

(Estimated)

(Estimated)

(Estimated)

8500

0

_		mscf/day	_
	House Tap	0	
	Chemical Injection Pumps	0	
	Auxillary Equipment	0	combuster
_			

Total Fuel Gas to Report	0.53	mscf/day
101011 001 000 10 110 0011		1110017414

All gas used split between the wells attached to the battery

Fuel gas calculations methodology:

Fuel gas is calcualted by using the BTU rating of the gas (wet rating) that has been determined

via gas analysis, the elevation of the well (due to derating of HP), separator burner rating,

natural gas engines located on location with the manufacturer HP rating at 80% load which is

the maximum recommended continuous run rating HP from the manufacturers.

Main Burner gas usage calculation - (((burner BTU-hr/Actual BTU)*24)/1000)*(Time % factor/100) = Gas used by main burner

Pilot Burner gas usage calculation - (((burner BTU-hr/Actual BTU)*24)/1000)*(Time % factor/100) = Gas used by main burner

Pump unit engine - fuel usage per manufacturer specs if available, if not, calculated per HP calculations comparabel to compressor calcs

calculated by derating engine for the elevation - (HP Rating @ 80% Load)*(1-((Elevation-2000)/1000)*(Elevation derating factor for naturally aspirated or turbo charged engines)

then using the following formula - ((Engine fuel usage from manufacturer/BTU from gas analysis)*Elevation derated HP)*24)/1000

Fuel usage for all equipment is then summed for the site.

Fuel gas calculations methodology:

Fuel gas is calcualted by using the BTU rating of the gas (wet rating) that has been determined via gas analysis, the elevation of the well (due to derating of HP), separator burner rating, natural gas engines located on location with the manufacturer HP rating at 80% load which is the maximum recommended continuous run rating HP from the manufacturers.

Main Burner gas usage calculation - (((burner BTU-hr/Actual BTU)*24)/1000)*(Time % factor/100) = Gas used by main burner Pilot Burner gas usage calculation - (((burner BTU-hr/Actual BTU)*24)/1000)*(Time % factor/100) = Gas used by main burner Pump unit engine - fuel usage per manufacturer specs if available, if not, calculated per HP calculations comparabel to compressor calcs Compressor fuel usage -

calculated by derating engine for the elevation -

(HP Rating @ 80% Load)*(1-((Elevation-2000)/1000)*(Elevation derating factor for naturally aspirated or turbo charged engines) then using the following formula - ((Engine fuel usage from manufacturer/BTU from gas analysis)*Elevation derated HP)*24)/1000 Fuel usage for all equipment is then summed for the site.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 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**

QUESTIONS

Action 77428

QUESTIONS

Operator:	OGRID:
EPIC ENERGY, L.L.C.	372834
332 Road 3100	Action Number:
Aztec, NM 87410	77428
	Action Type:
	[UF-FAC] TB Registration (TB-REG)

QUESTIONS

Facility Details		
Please answer all of the questions in this group.		
Name of the facility	South Blanco Federal 23 #3, 4 TB	
Date the facility was opened	Not answered.	
Depth to ground water, if known	Not answered.	

Verification		
Does the operator have other facilities with a matching name	No	
Are there other facilites located within approximately 50 feet	No	

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720 District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 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**

ACKNOWLEDGMENTS

Action 77428

ACKNOWLEDGMENTS

Operator:	OGRID:
EPIC ENERGY, L.L.C.	372834
332 Road 3100	Action Number:
Aztec, NM 87410	77428
	Action Type:
	[UF-FAC] TB Registration (TB-REG)

ACKNOWLEDGMENTS

⋉	I certify that I am authorized to register a facility on behalf of the responsible operator.
V	I certify that I will notify OCD of any changes of ownership for this facility.
✓	I certify that I will notify OCD when this facility is closed.