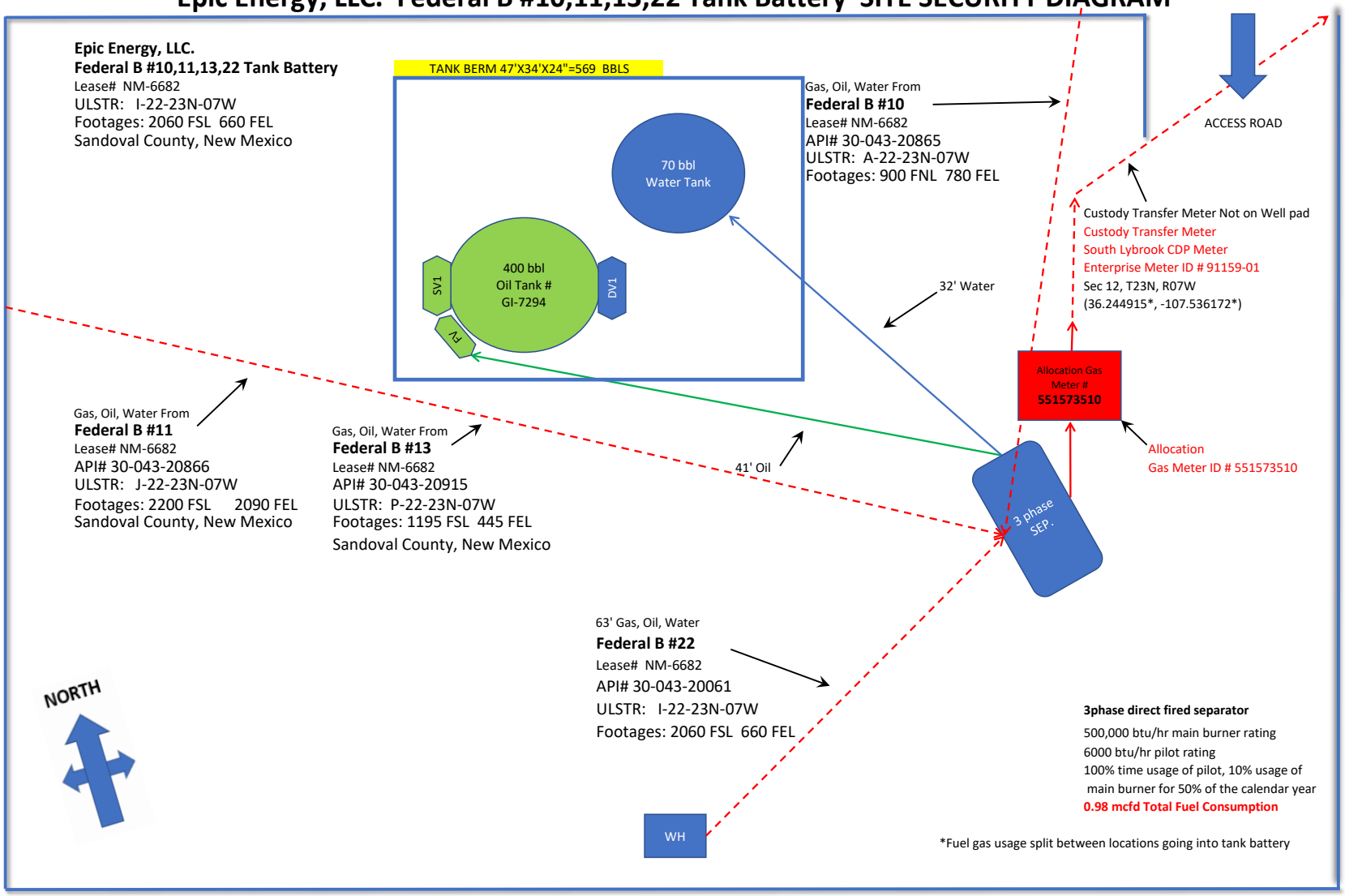
Epic Energy, LLC. Federal B #10,11,13,22 Tank Battery SITE SECURITY DIAGRAM



Attachment to the Site Security Diagram - Federal B #10,11,13,22 Tank Battery

Epic Energy, LLC.
Federal B #10,11,13,22 Tank Battery
Lease# NM-6682
ULSTR: I-22-23N-07W
Footages: 2060 FSL 660 FEL
Sandoval County, New Mexico

Attachment to the Site Security Diagram - Federal B #10,11,13,22 Tank Battery
Production phase:
All drain valves (DV1) sealed closed.
All sales valves (SV1) sealed closed.
Fill Valve (FV1) open
Sales phase:
The tank from which the sales are being made will be isolated
by sealing closed the drain valve (DV1) and fill valve (FV1)
and removing and recording the seal from (SV1)
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 (SV1) and fill valve (FV1)
during the water drain.

Fuelgas Usage Calculations

Lease Name: Epic Energy, LLC.
Federal B #10,11,13,22 Tank Battery
Lease# NM-6682
ULSTR: I-22-23N-07W
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Sandoval County, New Mexico

Pump Unit Engine Table

	A	B	
Engine Type	**HP**	**MCF/D USAGE**	
C46 ARROW	8.8	2	(from Arrow)
C-66 ARROW	12.3	2.5	(from Arrow)
C-96 ARROW	18.8	3.0	(from Arrow)
Electric	NA	0	
KUBOTA 1600	16	2	
KUBOTA 3200	32	3.81	
KUBOTA (DG-972-E2)	25	2.5	
KOHLER 27 hp	25	3	
KOHLER 18 hp	16	2	
AJAX DP60 (9 1/2 x 12)	60	7.1	
AJAX E42 (8 1/2 x 10)	42	5	
AJAX EA30 (7 1/2 x 8)	30	3.6	
AJAX EA15	15	2	
AJAX EA22 (6 1/2 x 8)	22	2.6	
None	NA	0	

Horsepower Engine Table

		D	E	
Engine Type	HP (100% Load)	HP (80% Load)	Fuel Consumption	
GS-10 - 80hp	80	64	8319	(Estimated)
Twin Stars BOSS GM3.0L	32	26	8500	(Estimated)
Gemni G26	26	21	8000	
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	225	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	
8.3 Cummins (turbo charged)	175	140	7560	
855 Cummins (turbo)	281	225	8617	
KTA19GC	420	336	7961	
KTA19GC-SLB	420	336	8172	
FLUID COMP GM-350	80	64	8319	
3304 CATERPILLAR	95	76	7778	
VRG-330 ARROW/WAKESHAU	68	54	8038	(Estimated)
KAWASAKI(Poquito) - 750	15	12	8350	(Estimated)
KUBOTA (DG-972-E2)	23.6	19	8000	
VRG-220 ARROW/WAKESHAU	52	42	8250	
KOHLER - 18hp	18	14	8500	(Estimated)
KOHLER - 27hp	27	22	8500	(Estimated)
Electric			0	
None			0	

Fuel gas Calculations:

	BTU / scf		% Used
HV from Gas Analysis	1369	Burner	10
Elevation	7175	Pilot	100

*Fuel gas usage split between locations going into tank battery

Vessels

	Burner BTU Rating	mscf/day	Pilot BTU Rating	mscf/day	Total
Separator	500000	0.9	6000	0.11	0.98
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	**0.88**			**0.11**	**0.98**

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

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

Total Fuel Gas to Report	**0.98**	mscf/day

*Fuel gas usage split between locations going into tank battery

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 Calculations for Vessels

How to Use: All **Blue Text Cells** require some kind of manual data entry, either by typing the value in, or selecting from a drop down menu (Engines Calculaiton Table).
The **Red Text Cells** are calculated values. The total fuel gas to be reported for the lease

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.

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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
District IV
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 77224

QUESTIONS

Operator: EPIC ENERGY, L.L.C. 332 Road 3100 Aztec, NM 87410	OGRID: 372834
	Action Number: 77224
	Action Type: [UF-FAC] TB Registration (TB-REG)

QUESTIONS

Facility Details	
Please answer all of the questions in this group.	
Name of the facility	Federal B #10, 11, 13, 22 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

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	Action Number: 77224
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ACKNOWLEDGMENTS

☑	I certify that I am authorized to register a facility on behalf of the responsible operator.
☑	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.