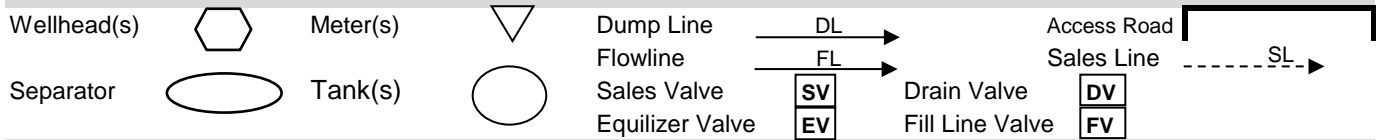
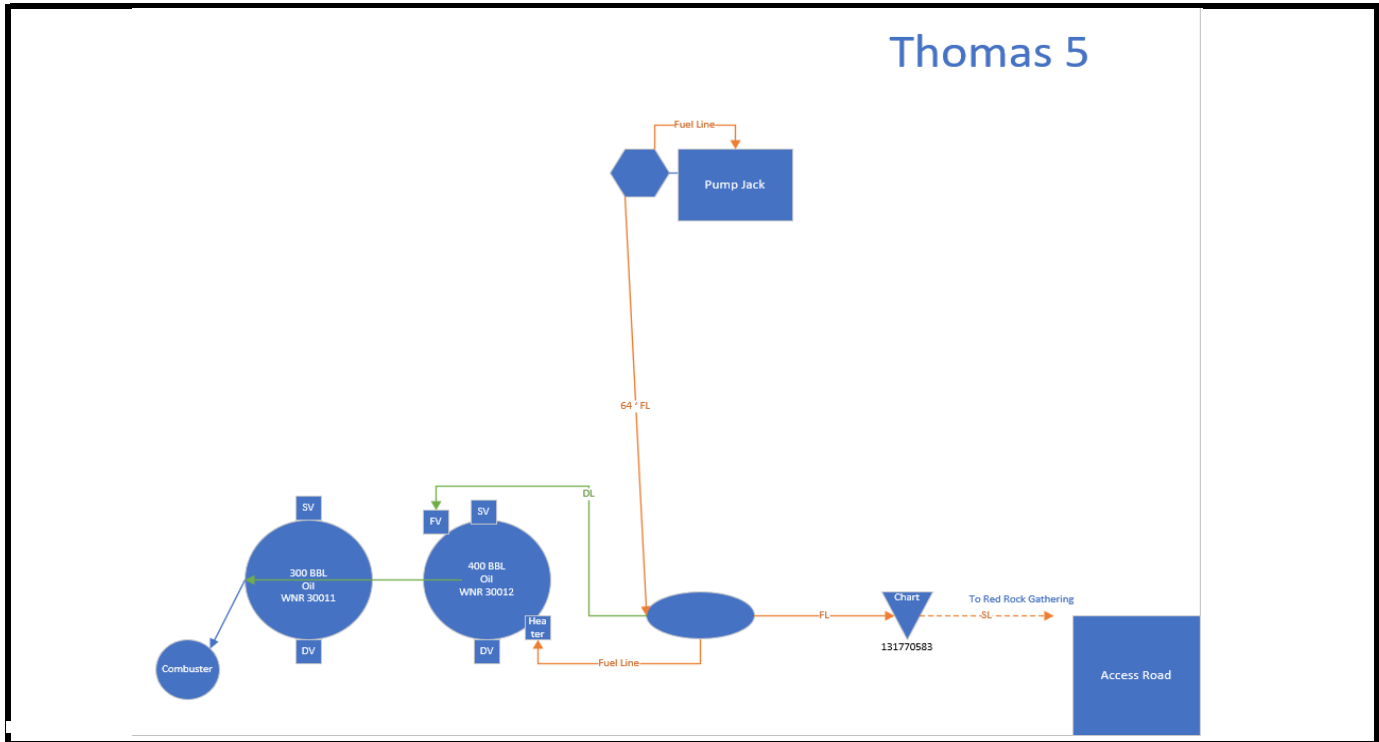


# UTAH GAS CORP - SITE SECURITY DIAGRAM

GJFO

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## Thomas 5



	<b>T/R/S</b>	T	9S	R 104	Lot 20	Sec 4		
	<b>Lease</b>	COC65155						
	<b>Unit</b>							

<b>Well Name</b>	Thomas 5						
<b>API</b>	05-077-10161						<b>PA or CA:</b>

**Royalty-Free Use Calculation\***

- It is estimated that the Main burner assembly runs for 50% of the time duration noted due to ambient temperature variation.
- Pilot assembly usage is based on a 1/32" orifice, 6000 BTU/HR consumption. Pilot runs continuously for time noted.
- Catalytic Heater BTU/Hr usage taken from the Catco USA website (G series).
- BTU/HR to MCFD Formula - BTU/HR rating, divided by 1028 (BTU of one CF of nat. gas) equals CF per hr. used, divided by 1000, equals MCF(thousands of CF) per hour used, multiplied by number of hrs. used, equals daily consumption.
- Engine Horse Power Elevation De-rating - 3% reduction for 5000' above sea level and an additional 3% reduction for each additional 1000' of elevation gain. ALL UGC SITES ARE ESTIMATED AT 6000' OF ELEVATION.
- Engine Fuel Usage Formula - (7 X de-rated BHP = cubic ft. per hour) x 24 hours / 1000 = MCFD usage
- Combustor Fuel Usage Formula - 24.03cfh x 24hrs. = 576.72 / 1000 = 0.58 MCFD
- Pneumatic Pump Usage Calculation- Based upon bucket test. Took average of GPM of glycol moved then extrapolated via Sandpiper pump specs provided by manufacturer.

Equipment	Monthly Vol. (MCF)	How Volume Determined
3 P Separator Heater, 250,000 BTU/HR Main Burner	43.77	250000/1028/1000x12x30x6/12=43.7743
3P Separator Heater, 6,000 BTU/HR Pilot Burner	2.101	6000/1028/1000x24x30x6/12=2.1011
Tank Heater, 250,000 BTU/HR Main Burner	43.77	250000/1028/1000x12x30x6/12=43.7743
Tank Heater, 6,000 BTU/HR Pilot Burner	2.101	6000/1028/1000x24x30x6/12=2.1011
Pump Jack Engine (Arrow C-66)	61.588	(7x12.22x24/1000)x30=61.5888
Combustor	17.3016	24.03*24/1000*30*12/12
<b>Total Monthly Vol. (MCF) -</b>	<b>153.33</b>	

**Notes:**  
 Arrow C-66 13 BHP (Sea Level) – 12.22 de-rated for elevation BHP

**This Diagram may include other agency information at the discretion of UGC**  
**SPCC Diagrams located in UGC Rangely Office**

<b>Author:</b> CF	<b>Date:</b> 11-16-21
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**VALVE NOTES:**

- Prod Phase:** DV, SV shut and sealed /FL and EQ open
- Sales Phase:** DV Closed / SV open /FL and EQ closed and sealed
- Water Drain:** DV Opened / then DV closed & resealed / SV closed and sealed

\* Royalty Free Use Equipment  
 Compressor / Separator / Dehy  
 Heater-Treater / Tank Heater, etc.