Pressure Blanket Procedure

Frac Blanket Wells - See Fig. 1 for Wellbore Layout

Booth Federal DD06-785 (05-123-49303)

Wells Fracing

Guttersen Ranch State C36-725 (05-123-49103)

Guttersen Ranch State C36-735 (05-123-49100)

Guttersen Ranch State C36-745 (05-123-49098)

Guttersen Ranch State C36-750 (05-123-49097)

Equipment on Location - See Fig 2. for Pressure Blanket Equipment Layout

8 frac tanks

Piping manifold for frac tanks (water storage)

1 chemical trailer treating freshwater w/ biocide to prevent bacterial fouling

1 Booster truck

2 Pump trucks (1 for backup)

Piping on discharge side of the pump truck

1 Frac tank for flow back

Volume, Pressure and Rate Consideration

Total freshwater volume 57,000 bbls target, 67,000 bbls permitted

Pumping rate 0.5-5 bbls/min

Max pressure at surface 3,000 psia (safety kill switch setup on pump to not exceed 3000 psi)

Frac gradient in the area is around 0.98 psi/ft

Maximum Bottomhole pressure = 5,921 psi. ~ 3,000 psi at surface and 2,921 psi hydrostatic assuming no friction. Gradient is 0.88 psi/ft which is below frac gradient.

Initial pressure on Wellhead

Tubing = 1107 psi and Casing = 155 psi

Timing

Pumping operation will continue no longer than 3 weeks (but planned dates are approximately 8/8/23 – 8/22/23). Frac will start on approximately 7/27/23.

Procedure:

1. Rig up equipment on location (frac tank, flowback tank, biocide, pumps, piping)
2. Shut-in casing and open tubing.
3. Start pumping at 1 bbl/min through tubing (recording pressure, rate and volume)
4. If the pressure stays below 3000 psi after an hour, bump rate to 2-3 bbls/min (MAX RATE 5 BBLS/MIN AND PRESSURE 3000PSI)
5. Pump all 57,000 bbls away (24 hour operation). Monitor Pressure on offset wells.
6. Shut well in after all volume pumped.
7. RDMO
8. Once offset well is finished fracing, bring well back online normally or by using green flowback (Fig. 3)

Fig. 1

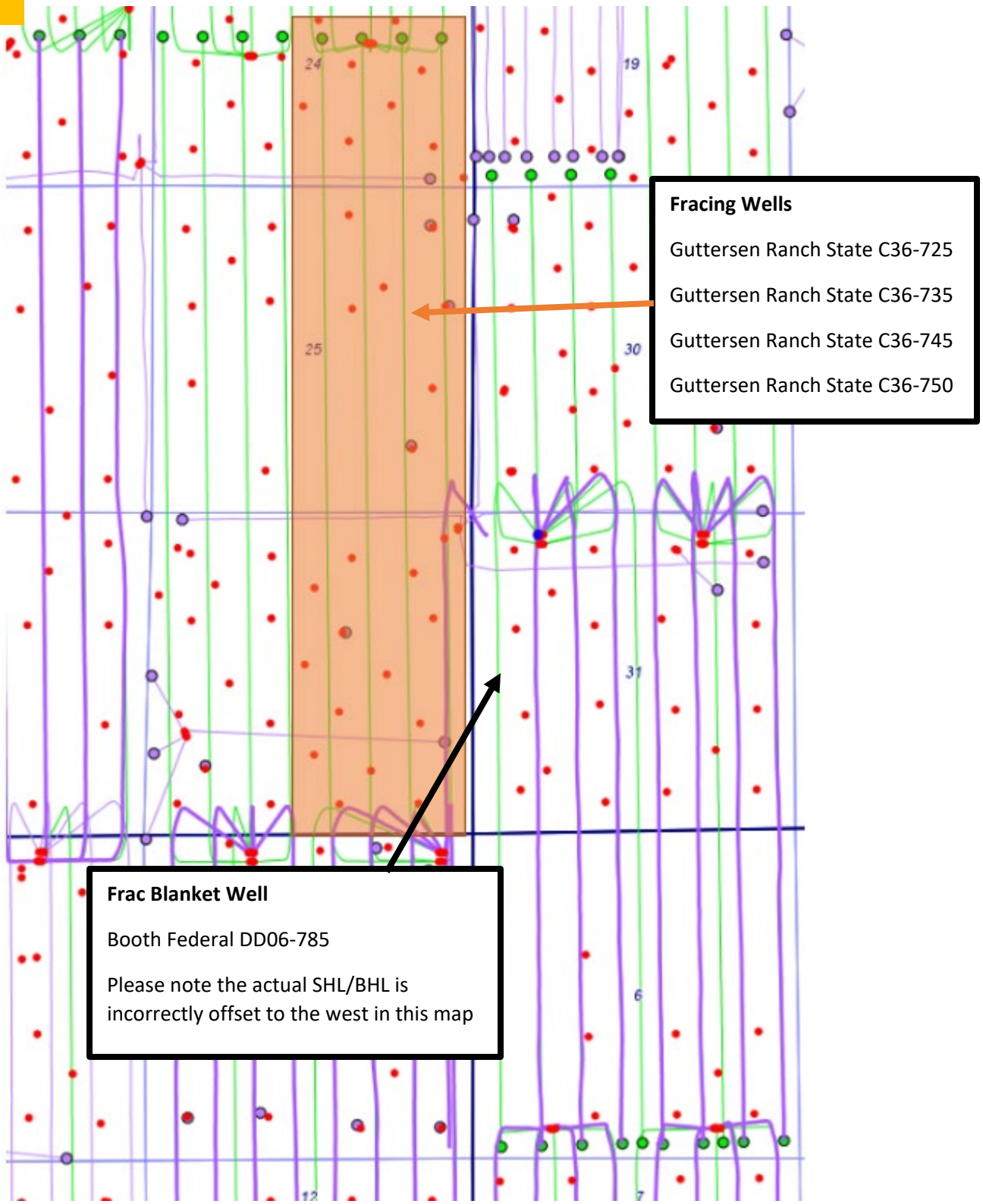

24
19
25
30
31
6
12
7
Fracing Wells
Guttersen Ranch State C36-725
Guttersen Ranch State C36-735
Guttersen Ranch State C36-745
Guttersen Ranch State C36-750
Frac Blanket Well
Booth Federal DD06-785
Please note the actual SHL/BHL is incorrectly offset to the west in this map

Fig. 2

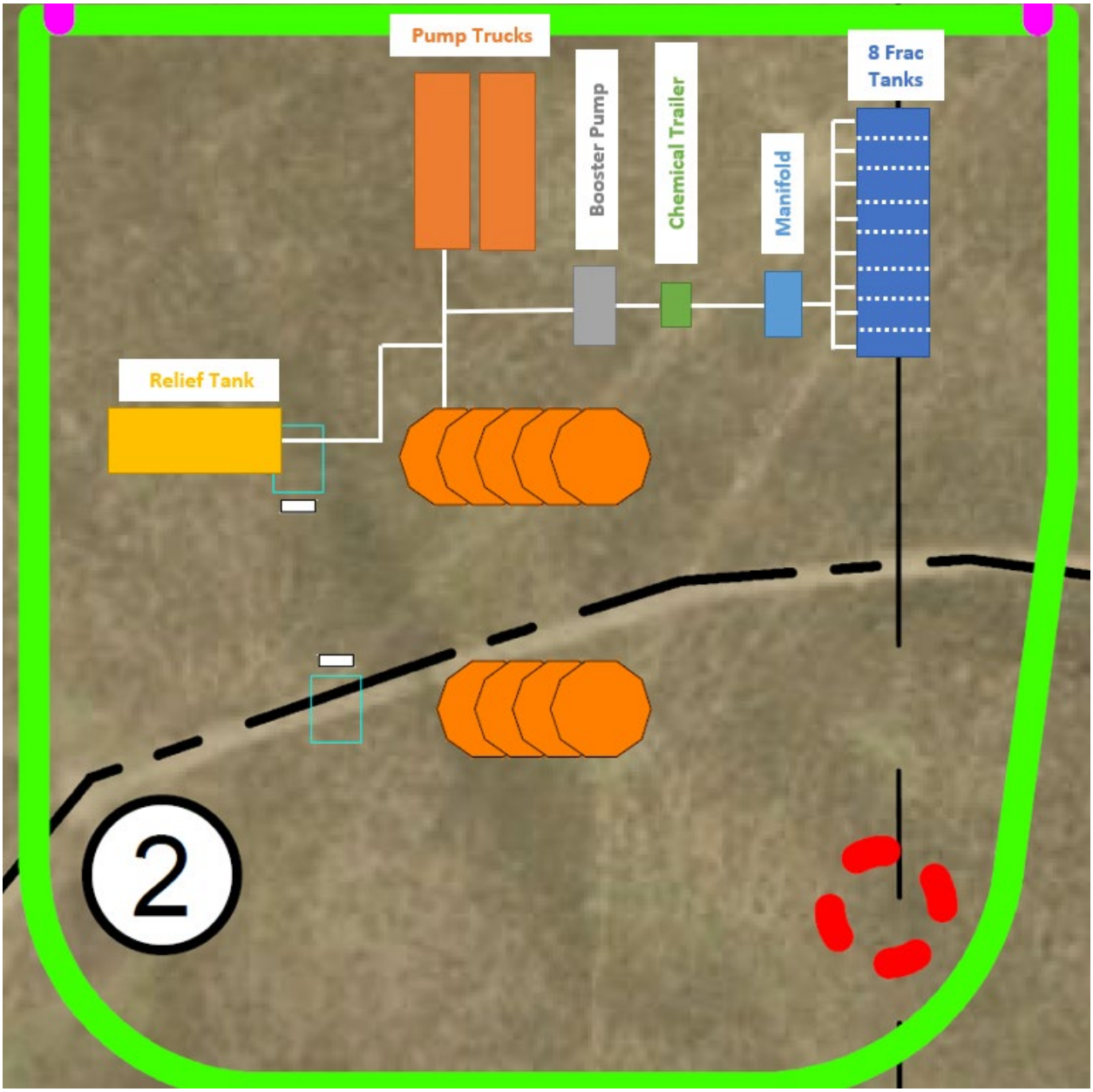
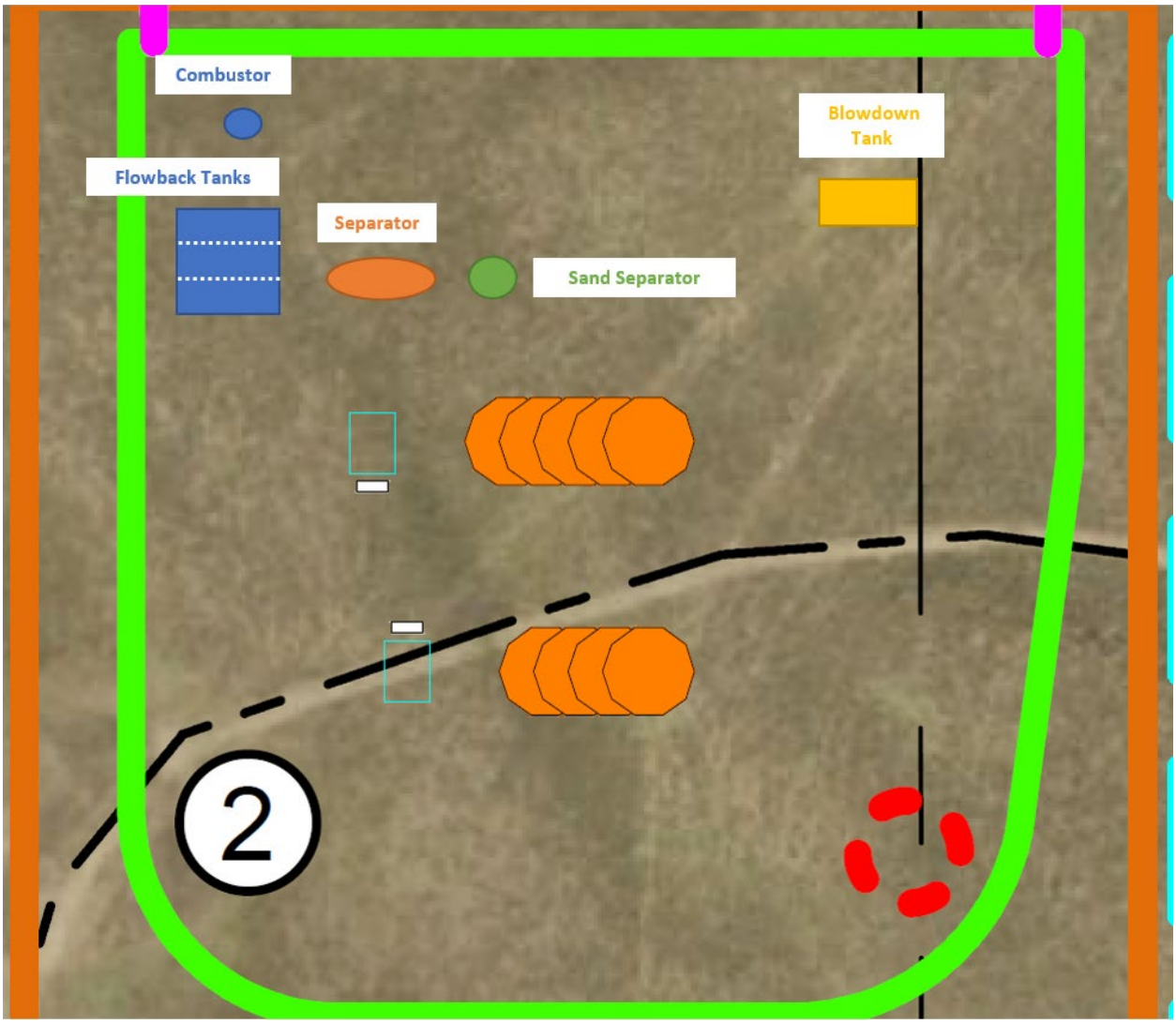
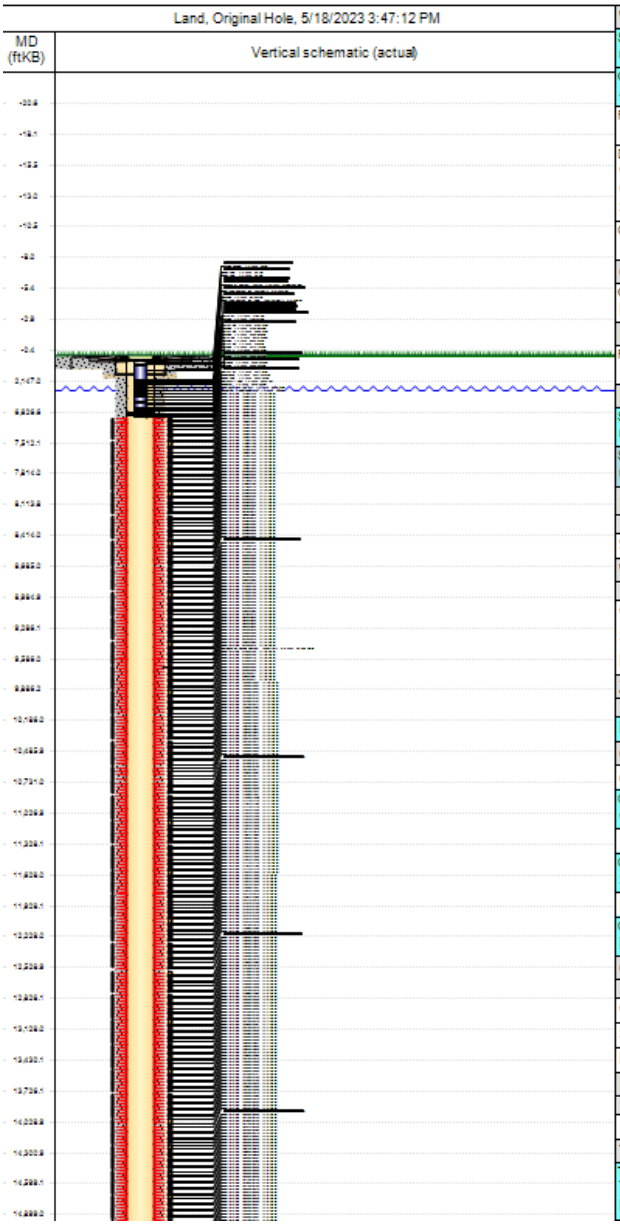

Pump Trucks
Booster Pump
Chemical Trailer
Manifold
8 Frac Tanks
Relief Tank
2

Fig. 3


Combustor
Blowdown Tank
Flowback Tanks
Separator
Sand Separator
2

WBD

Well Name: BOOTH FEDERAL DD06-785



Well Header

Surface UWI	Asset Team	Production Tree Location
0512349303		Land

Original RKB Elevation (ft)	Original KB to Ground (ft)	Original Spud Date	Abandon Date
4,805.00	29.00	8/8/2022	

Range	Well Sub-Status	High Press...
	PR	N

Directions To Well	Latitude (°)	Longitude (°)
CR 40 & 57, S 1, E INTO BOOTH PROPERTY GATE, FOLLOW RD 2 MILES EAST, N 1, E 0.1, S INTO	40.274988746	-104.486088939

Comment

Congressional Location

Quarter 3	Quarter 4	Section	Township	Twnshp N/S Dir	Range	Range E/W Dir
NW	NW	31	4	N	63	W

Rig Operator

Rig/Unit Supervisor

Daily Cost Summary

Sum of Field Est (Cost)
0

Sum of Field Est (Cost)
0

Plug Back Total Depths

Date	PBTD (ftKB)	Method	Com
9/3/2022	17,378	CSG TALLY	BALL SEAT SUB

Wellbore Sections

Section Des	Hole Size (in)	Act Top (ftKB)	Act Btm (ftKB)
CONDUCTOR	26	29.0	109.0
SURFACE	13 1/2	109.0	1,957.0
PRODUCTION	8 1/2	1,957.0	17,411.0

Zone Statuses

Zone Name	Status Date	Status
NIOBRARA	2/9/2023	

Casing Strings

Conductor, Planned?-N, 109ftKB

Casing Description	Run Date	OD (in)	Wt/Len (l...	Grade	Top Depth ...	Set Depth ...
Conductor	7/29/2022	26	125.00	X-56	29	109

SURFACE, Planned?-N, 1947.2ftKB

Casing Description	Run Date	OD (in)	Wt/Len (l...	Grade	Top Depth ...	Set Depth ...
SURFACE	8/9/2022	9 5/8	36.00	J-55	29	1947.2

Production Casing, Planned?-N, 17396.9ftKB

Casing Description	Run Date	OD (in)	Wt/Len (l...	Grade	Top Depth ...	Set Depth ...
Production Casing	9/3/2022	5 1/2	17.00	P-110	29	17396.9

Cement

Des	Start Date	Top (ftKB)	Btm (ftKB)
Conductor Cement	7/29/2022	29.0	109.0
Surface cement job	8/9/2022	29.0	1,947.2
Production Casing Cement	9/3/2022	1,953.0	17,411.0

Proposed Cement

Des	Top (ftKB)	Btm (ftKB)

Tubing Strings

Tubing Description	Run Date	String ...	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Set De...
TUBING - PRODUCTION	1/2/2023	2 3/8	2.000	4.70	L-80	6,606.25	6,453.4