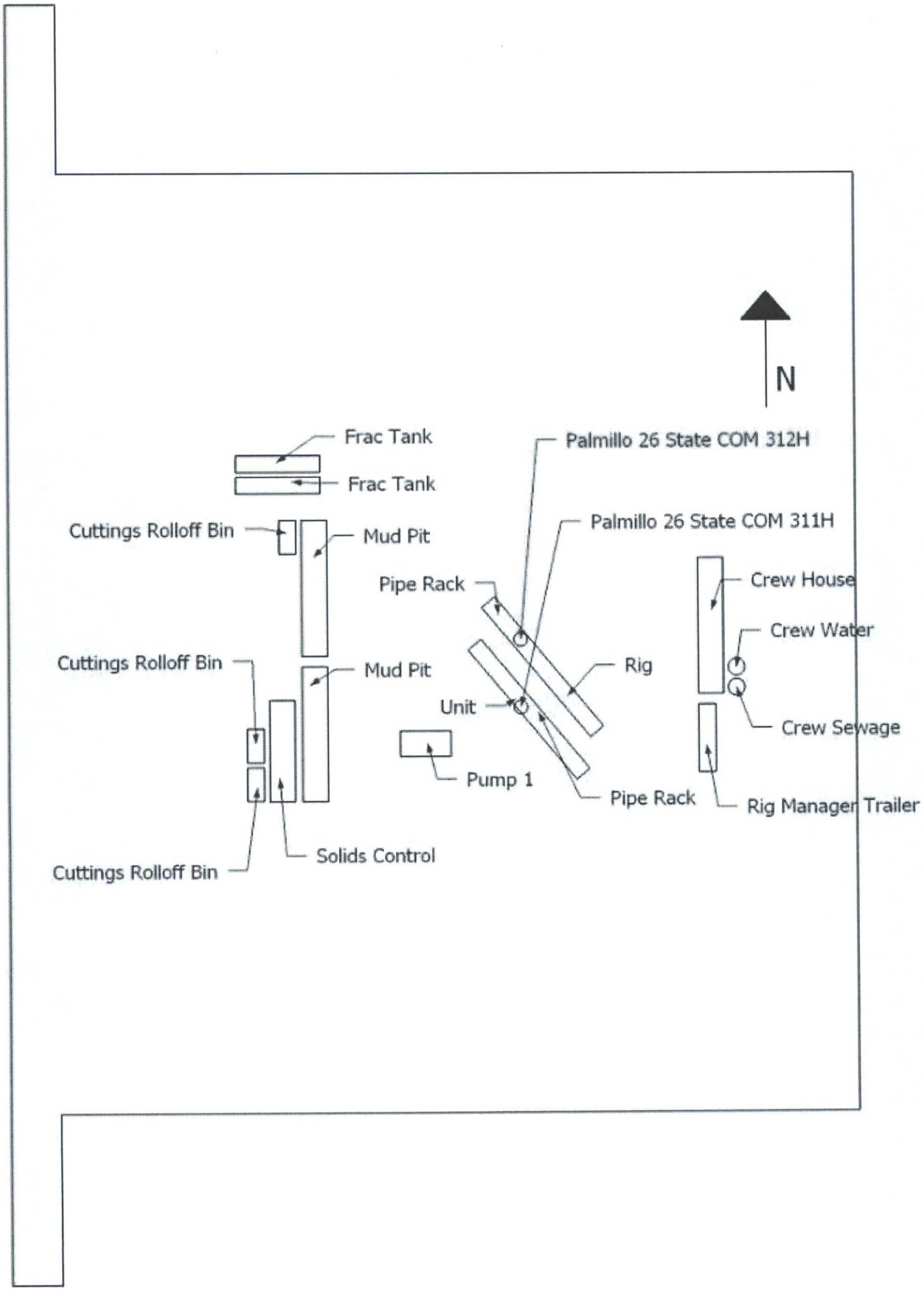
Palmillo 26 State 311H
30-015-44903

Apache Corp respectfully requests approval for the following changes and additions to the drilling plan:

1. Utilize a spudder rig to pre-set surface casing.
2. Description of Operations
    1. Spudder rig will move in their rig to drill the surface hole section and pre-set surface casing on the Palmillo 26 State COM 312H.
        a. After drilling the surface hole section, the rig will run casing and cement following all of the applicable rules and regulations (19.15.16 NMAC Drilling and Production).
        b. Rig will utilize fresh water based mud to drill 17-1/2" surface hole to TD. Solids control will be handled entirely on a closed loop basis.
2. The wellhead (page 3) will be installed and tested once the 13-3/8" surface casing is cut off and the WOC time has been reached.
3. A blind flange with the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with a pressure gauge installed on the wellhead.
    a. A means for intervention will be maintained while the drilling rig is not over the well.
4. Spudder rig operations is expected to take 1-2 days on a single well pad.
5. The NMOCD will be contacted and notified 24 hours prior to commencing spudder rig operations.
6. Drilling operations will be performed with the drilling rig. At that time an approved BOP stack will be nippled up and tested on the wellhead before drilling operations commences on each well.
    a. The NMOCD will be contacted / notified 24 hours before the drilling rig moves back on to the pad with the pre-set surface casing.
7. Apache Corp will have supervision over the rig to ensure compliance with all NMOCD regulations and to oversee operations.
8. Once the rig is removed, Apache Corp will secure the wellhead area by placing a guard rail around the cellar area.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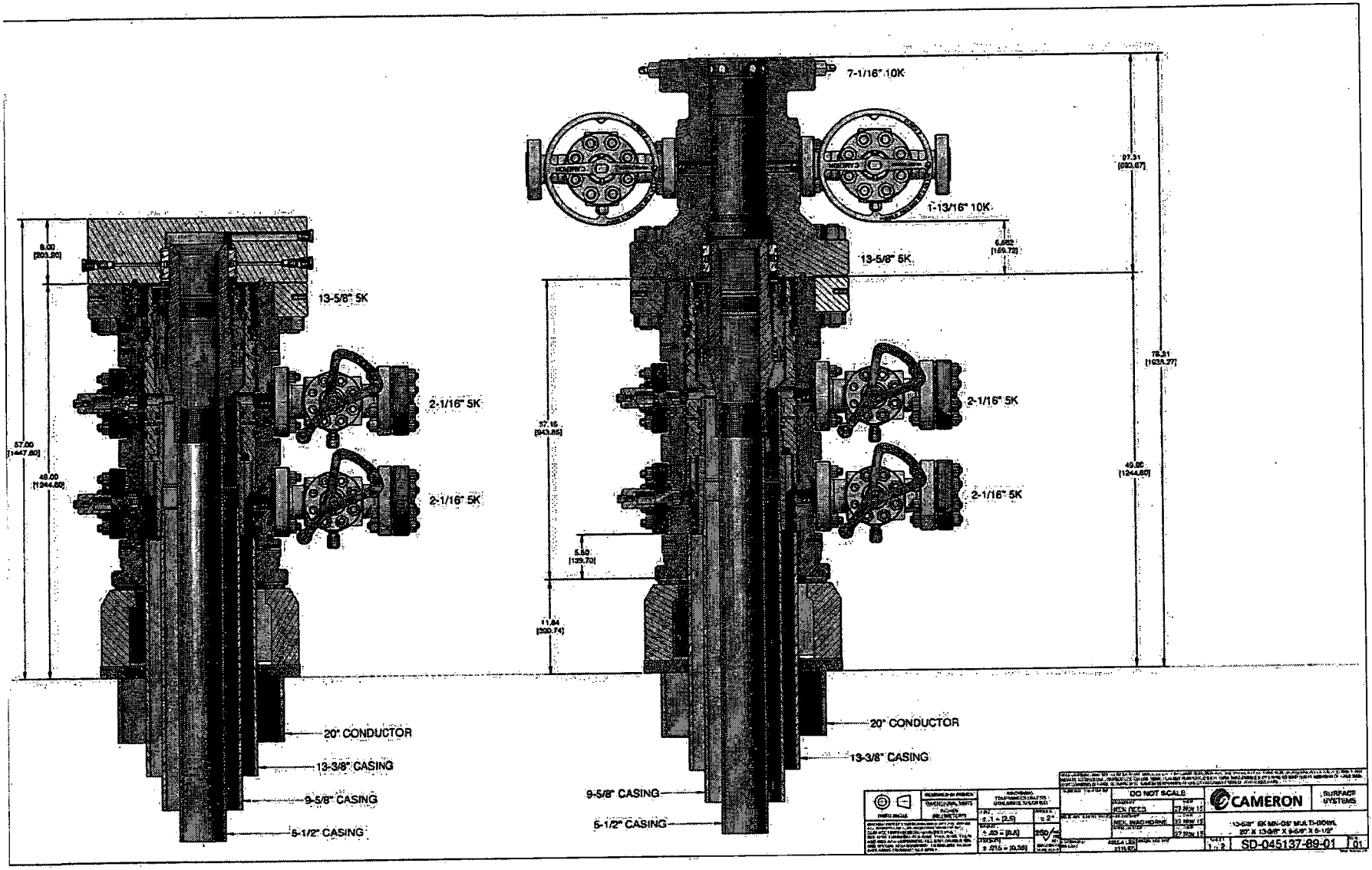
Frac Tank
Frac Tank
Palmillo 26 State COM 312H
Palmillo 26 State COM 311H
Cuttings Rolloff Bin
Mud Pit
Pipe Rack
Crew House
Crew Water
Cuttings Rolloff Bin
Mud Pit
Rig
Unit
Crew Sewage
Pump 1
Pipe Rack
Rig Manager Trailer
Cuttings Rolloff Bin
Solids Control



DO NOT SCALE

CAMERON

SURFACE SYSTEMS

13-5/8" 5K MN-DS MULTI-BOWL
20" X 13-3/8" X 9-5/8" X 5-1/2"

SD-045137-89-01

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PALMILLO 26 STATE COM 311H

30-015-44903

	Fluid Type (air, FW, Cut Brine, Brine, Prod Wtr, Mud, Oil Base Mud)	Hole Sz	Csg Sz	Csg Grade	Csg Wt (lbs/ft)	Top MD	Setting Depth	Total Sx Cmt (lead/tail)	Est TOC
Surf	FW	17-1/2"	13-3/8"	H-40	48	0	400	285	0
Interm1	Brine	12-1/4"	9-5/8"	J-55	40	0	8000	1310	0
Interm2									
Prod	Cut Brine/Mud	8-3/4"	5-1/2"	P-110	17	0	8938	220	7500
	Cut Brine/Mud	8-1/2"	5-1/2"	P-110	17	8938	13526	860	8938

BOP type: 13-5/8" Annular & Double Ram **WP:** 3000 psi **TP:** 3000 psi for Rams and 1500 psi for Annular

(Types: Annular, Double Ram, Pipe, Blind, Hydril)

A spudder rig will be used to set surface (See attachment).

A flex line will be used with the big rig for the choke manifold.

NM OIL CONSERVATION
ARTESIA DISTRICT
APR 25 2018
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Contingencies:

For the deep set intermediate casing string if lost circulation is encountered, Apache may 2-stage intermediate casing. A DVT may be used in the 9-5/8" casing & ECP may be placed below DVT. DVT depth(s) will be adjusted based on hole conditions & cmt volumes will be adjusted proportionally. Lab reports with the 500psi comp strength time for cmt will be onsite for reveiw.

	Fluid Type (air, FW, Cut Brine, Brine, Prod Wtr, Mud, Oil Base Mud)	Hole Sz	Csg Sz	Csg Grade	Csg Wt (lbs/ft)	Top MD	Setting Depth	Total Sx Cmt (lead/tail)	Est TOC
Interm1	Brine	12-1/4"	9-5/8"	J-55	40	0	8000	1745	0

The deep set intermediate casing is being planned due to the possible risk of overpressure in the lateral based on a nearby offset well. Below is the contingent shallow set intermediate casing design if there is no overpressure seen in the lateral:

	Fluid Type (air, FW, Cut Brine, Brine, Prod Wtr, Mud, Oil Base Mud)	Hole Sz	Csg Sz	Csg Grade	Csg Wt (lbs/ft)	Top MD	Setting Depth	Total Sx Cmt (lead/tail)	Est TOC
Surf	FW	17-1/2"	13-3/8"	H-40	48	0	400	285	0
Interm1	Brine	12-1/4"	9-5/8"	J-55	36	0	3000	625	0
Interm2									
Prod	Cut Brine/Mud	8-3/4"	5-1/2"	P-110	17	0	8938	725	2500
	Cut Brine/Mud	8-1/2"	5-1/2"	P-110	17	8938	13526	860	8938