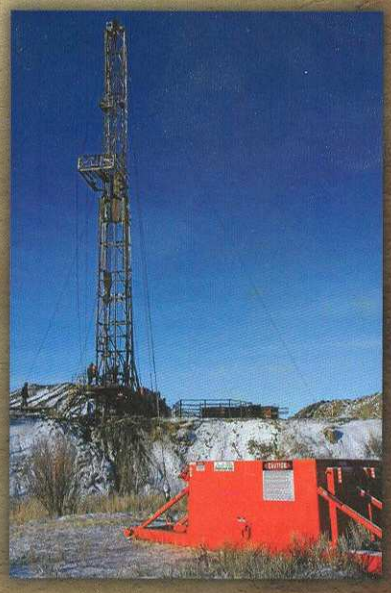
Lock-Tite ANCHOR CO.

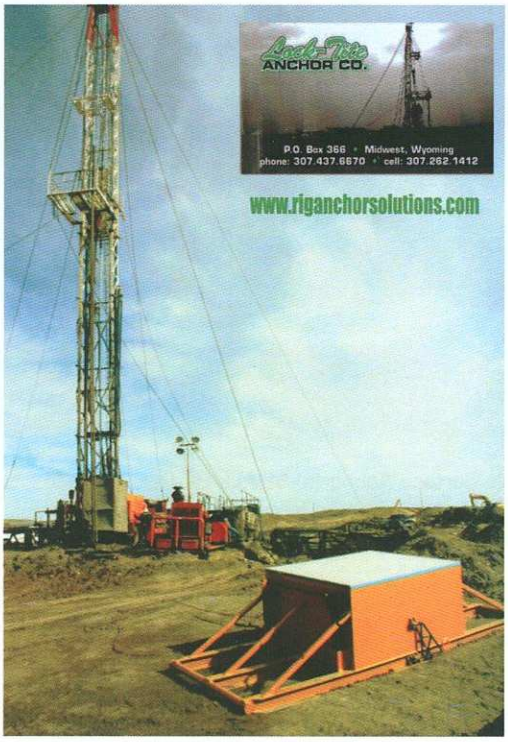
P.O. Box 366 • Midwest, WY 82643 • (307) 262-1412 • locktiteanchor@rtconnect.net

PSA

PORTABLE SURFACE ANCHOR

PATENT PENDING





The Portable Surface Anchor (P.S.A.) has been used in the field since 2005, working in accordance with Wyoming Occupational Health and Safety Administration (OSHA) rules and regulations.

Developed out of a necessity for a safe alternative to setting earth anchors, the P.S.A. can be used when underground utilities or conditions exist that do not allow excavation. The P.S.A. uses weight and teeth to hold to the surface instead of depending on unknown and constantly changing soil conditions. This method has been found to be very safe and consistent in passing all load test requirements and standards. With a gross weight of 48,500 lbs., the P.S.A. consists of a concrete ballast on a 3-rail skid with six adjustable, progressive teeth with built-in hard surface spikes. The P.S.A. has been engineered by a registered Professional Engineer and has been tested to meet or exceed load test requirements and standards of Wyoming OSHA in all types of conditions and environments. The engineering data is available upon request.

Through the years, the P.S.A. has gone through many changes in weight and design, simplifying use and improving efficiency. The P.S.A. is skid mounted for economy, durability, ease of loading and placement of the four sided anchor in virtually any location. With the number, design and adjustability of the teeth, and how they work on different surfaces, along with the support of the skid on soft surfaces, the P.S.A. can be set at almost any angle to the rig on most any surface condition.

Patent Pending

Portable Surface Anchor Safety Rules for Placement and Use

NOTICE TO USER

THE USER OF THIS Portable Surface Anchor(s) **SHALL BE RESPONSIBLE** for following the requirements below. (**NOTE:** It is the user's responsibility to verify and follow the Federal/State/local safety and health regulations in the state in which this Portable Surface Anchor is used.)

ATTENTION: Anchors are only one part of the overall system of rig stability. The prevention of rig tipover is directly dependent on the **TOTAL** integrity of the rig stabilization system and is only as sound as its weakest member. The overall system includes **ALL** rig components, as well as anchors. Sole emphasis should not be placed on anchors as the only area for guaranteeing rig stability.

CAUTION: PLACEMENT AND TESTING

This Portable Surface Anchor shall be placed by a competent person using only Wyoming Occupational Safety and Health (WOSH) Department Regulations for wind guyline anchor patterns. The Portable Surface Anchor shall be tested by a WOSH certified tester each time it is relocated or any change of condition occurs that affects its stability. In states that do not have applicable anchor testing requirements, Federal OSHA and A.P.I. rules and regulations shall be applied.

CAUTION: INSPECTION

BEFORE USING inspect hard surface spikes for damage while lowering teeth.

USER SHALL VISIBLY inspect this Portable Surface Anchor for damage, settling or other movement daily or at each change of shift.

CAUTION: RECOGNIZE SURFACE CONDITIONS

This Portable Surface Anchor shall be set on flat ground. Snow, debris and uneven surfaces that can prevent the teeth from sufficiently penetrating the ground shall be removed prior to placement of the anchor. All six (6) teeth shall be cranked completely down and must penetrate the ground. On hard surfaces such as frost, the skid may remain off the ground, as this does not affect its stability. Do not allow the skid to freeze to the ground. Use of boards between the ground and the skid may be needed. Any ground surface where the Portable Surface Anchor teeth cannot penetrate (or where regulations require calling before digging) shall have a minimum of twelve (12) inches of soil placed and compacted for use by the teeth. This Portable Surface Anchor shall not be set on any incline or decline without prior approval from a competent person. This Portable Surface Anchor shall not be set near any pits or edges of banks where it can settle or cause a cave off. Digging of any kind shall not be allowed near this Portable Surface Anchor without prior approval from a competent person. This Portable Surface Anchor shall not be set within ten (10) feet of overhead power lines. Water shall not be allowed to settle around this Portable Surface Anchor. Do not set this Portable Surface Anchor on top of any pipeline or utilities without prior approval. Settling can occur, guyline tension should be checked often.

CAUTION: "D" RING USE

USE ONLY the "D" ring that has been tested and tagged for use. DO NOT tie on to any other part of this Portable Surface Anchor

DO NOT tie any other equipment on to this Portable Surface Anchor

DO NOT use this Portable Surface Anchor for any purpose other than that for which it has been designed and tested

DO NOT weld on this unit

CAUTION: TEETH - LOADING AND UNLOADING

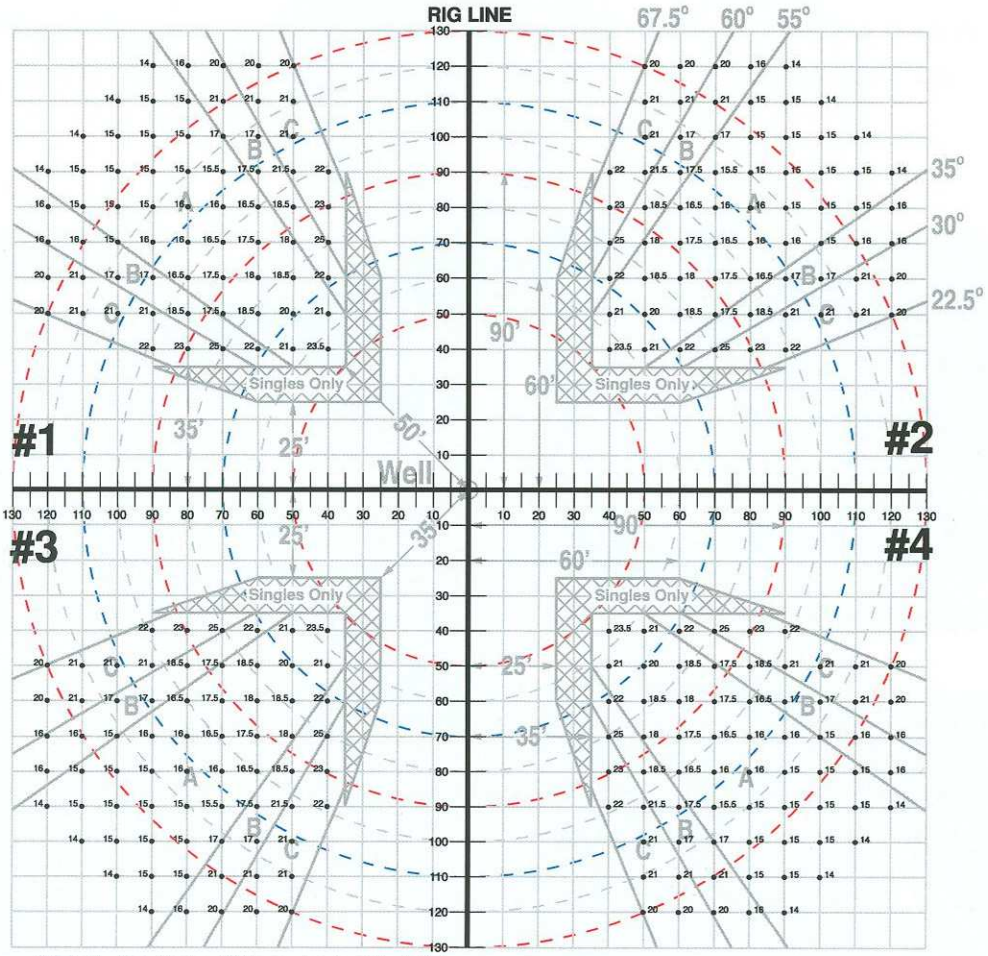
BEFORE USING: all teeth on both sides of this Portable Surface Anchor shall be cranked completely down. If possible, crank teeth down while unloading with weight off teeth. If not possible, use slow speed to lower teeth.

BEFORE LOADING: all teeth on both ends of this Portable Surface Anchor shall be cranked up completely.

Lock-Tite ANCHOR CO.

Patent Pending

WYOMING OSHA ANCHOR PLAT FOR SERVICE RIGS



Wind Guyline Anchor Pattern • Anchors Installed After 9-24-1970 • For Singles and Double Derricks

Lock-Tite Anchor Co.

Box 309 • Midwest, WY 82643
307/262-1412 • 307/437-6670

Rig and Industrial Anchor Setting and Testing
Portable Surface Anchors For Rigs and Geronimo

Comments:

Frost:	In ❑	Out ❑
Drainage:	Good ❑	Poor ❑
Damage:	Yes ❑	No ❑
Rig Stake:	Yes ❑	No ❑
Anchor Markers:	Yes ❑	No ❑

Test Date _____ Signature _____

Operator _____ Well Number _____ Anchor Installation Date _____

	Sector	Radial Distance	Elevation Deviation	Min. Req'd Pull Test	Initial Pull Test
Anchor #1					
Anchor #2					
Anchor #3					
Anchor #4					

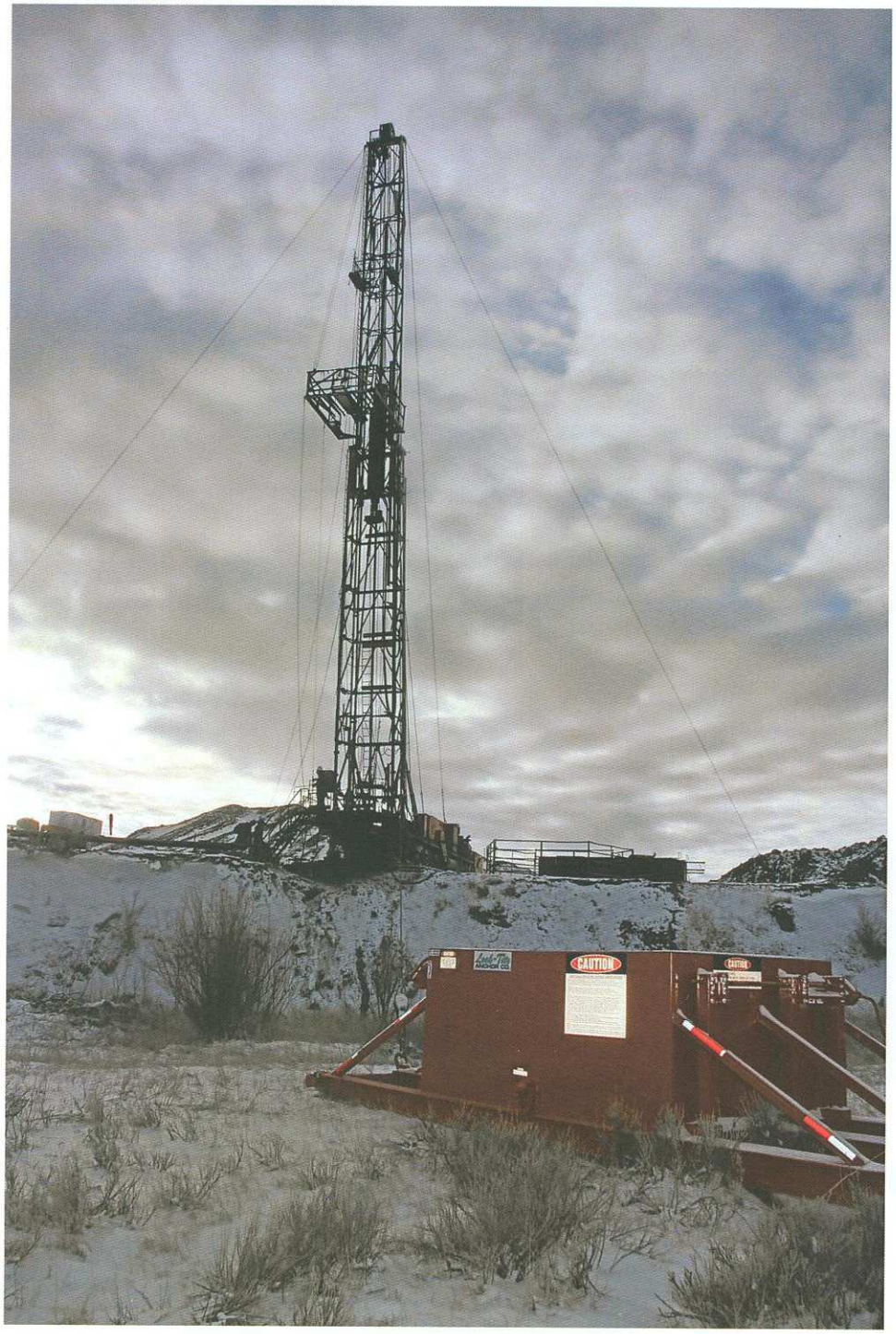
USE OVER UNDERGROUND UTILITIES

The following pictures are some of the underground conditions that Lock-Tite Anchor has run into over the years where the P.S.A. would allow safe anchor placement.

The P.S.A.'s skid-mounted design spreads the weight out to allow for use on top of underground utilities without damage. Other conditions may include well circulation, changing water levels, frost, rock, and limited space due to roads or right-of-ways, multi well locations and locations with liners underneath.

Lock-Tite ANCHOR CO.

Patent Pending



This photo is of a well that has been circulating. The circulation was coming to the surface between the wellhead and where the anchor needed to be set. Lock-Tite Anchor hit circulation about six feet down while trying to set an earth anchor. Due to constantly changing underground conditions from circulation, setting an earth anchor of any type was not an option.

Lock-Tite ANCHOR CO.

Patent Pending

LOADING & UNLOADING

Loading anchor to transport

Unloading anchor

Holding weight off anchor while lowering teeth

Teeth lowered, ready for placement

Lock-Tite ANCHOR CO.

Patent Pending

INDENTATION, D-RING, AND PRESSURE TESTS

Checking indentations made by teeth

Nalco-Fab Tech engineers checking angles during pull test on side and end "D-Ring"

Pressures verified by Quadco third party personnel

Lock-Tite ANCHOR CO.

Patent Pending

PULL TEST

with Nalco-FabTech

FIELD TEST

with Lock-Tite Anchor Co., Inc.

CEMENT PADS

Setting up for testing on cement pad

Lock-Tite ANCHOR CO.

Patent Pending

HARD FROST TEST

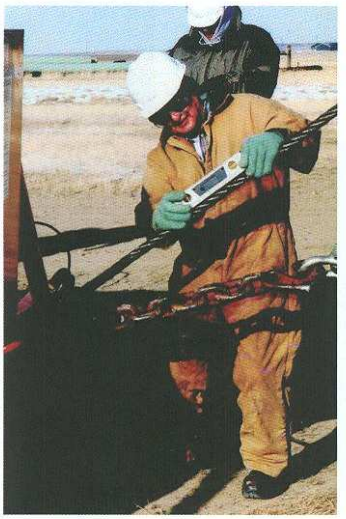
After several days of -20 degree weather, Lock-Tite Anchor and Nalco-FabTech tested the P.S.A.'s hard surface frost teeth on hard packed gravel. As in previous tests performed in the summer, a forklift was required in order to stabilize the winch truck to obtain a proper reading on the engineer's load cell due to the winch truck sliding from low coefficient of friction between tires and the ground.

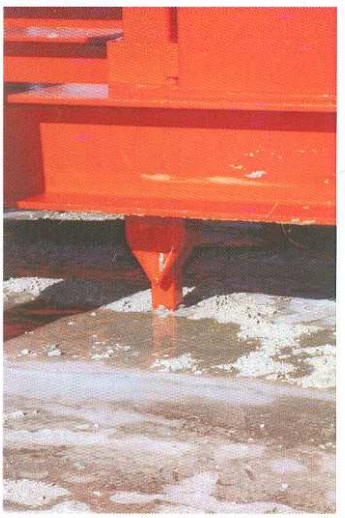
Lock-Tite ANCHOR CO.

Patent Pending

HARD FROST TEST

Photos taken during the hard frost test show the points of the teeth penetrating the frost. Under extreme loads, ranging from approximately 40k to 50k, lbs. the frost was giving way.





Lock-Tite ANCHOR CO.

Patent Pending

This is a photo of two P.S.A.'s being used on the top of a DOT pipeline right-of-way which is running along the side of the location.

Lock-Tite ANCHOR CO.

Patent Pending

COIL RIG UTILITY ANCHOR (CRU Anchor)

The CRU anchor was developed for use on coil rigs or any other equipment requiring a 15,000 lb. or less load rating. The CRU anchor has been engineered by a registered Professional Engineer and has been tested to meet or exceed load requirements (data available upon request). The CRU anchor weighs 21,000 lbs. and consists of a removable concrete ballast on a two rail skid with four lifting eyes allowing for lifting or skidding. The CRU anchor has rated "O" rings on all four sides for easy placement and four adjustable, progressive teeth with built-in hard surface spikes for use on multiple surface conditions. The following photos show our initial engineering test with Nalco-FabTech of Casper, Wyoming.

Lock-Tite ANCHOR CO.

Patent Pending

COIL RIG UTILITY ANCHOR PULL TEST

Initial test with teeth up for engineer's data

Cranking teeth down for side-pull test on soft soil

End-pull test on soft soil

Moving anchor to hard surface for hard surface test

Patent Pending

HARD-SURFACE TEST

Hard-surface spikes penetrating hard surface

Side-pull test on hard surface

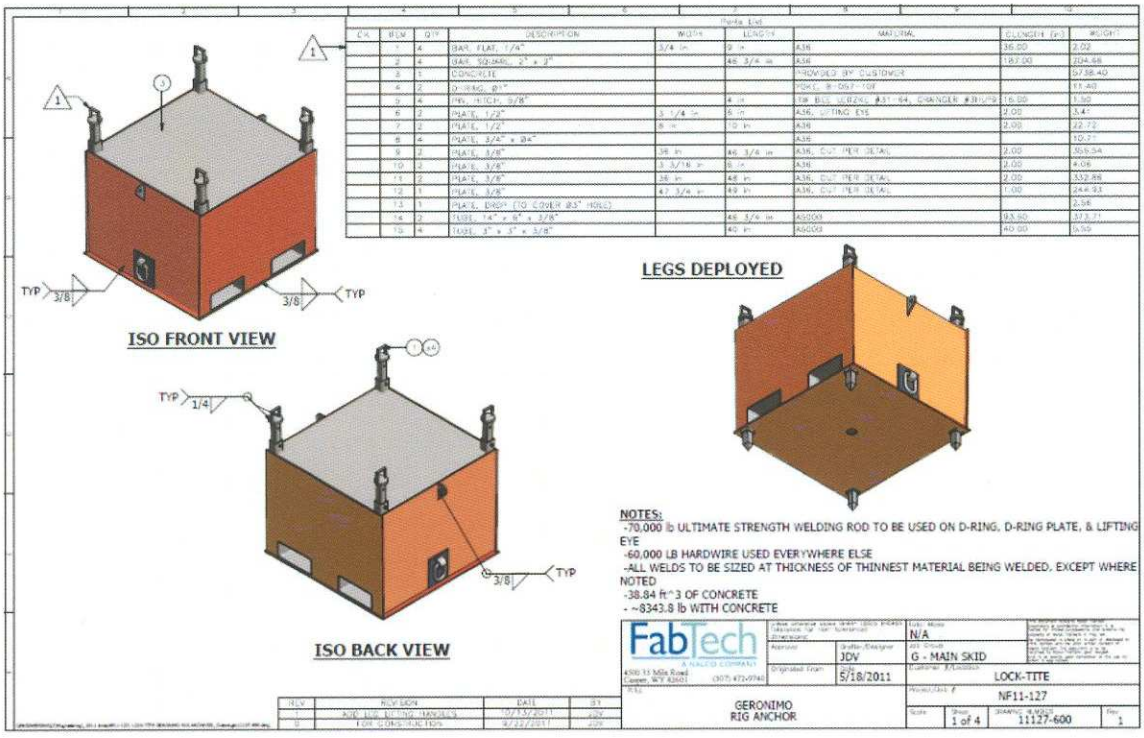
Dragging anchor along hard surface during side-pull test

End-pull test on hard surface

Dragging anchor along hard surface on end-pull test

EMERGENCY DESCENT UTILITY ANCHOR (EDU Anchor)

The EDU anchor was developed for use with emergency descent devices ("Geronimo") or any other equipment requiring a rated anchor. The EDU anchor can be ordered with different removable weights ranging from 4500 lbs. to 7500 lbs., depending upon use requirements. Most emergency descent devices require a 3000 lb. load test, while others may require up to a 5000 lb. load test. The EDU anchor has lifting eyes and fork tubes for ease of movement. The EDU anchor has been engineered by a registered, Professional Engineer and has been tested to meet or exceed load test requirements. The data provided by the engineer is available upon request.



Lock-Tite ANCHOR CO.

Patent Pending

Lock-Tite
ANCHOR CO.

P.O. Box 366
Midwest, WY 82643
(307) 262-1412 locktiteanchor@rtconnect.net