

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
 DRILL DEEPEN PLUG BACK
 b. TYPE OF WELL
 OIL WELL GAS WELL OTHER
 SINGLE ZONE MULTIPLE ZONE

2. NAME OF OPERATOR
 CCCO

3. ADDRESS OF OPERATOR
 3964 So State, SLC, UT

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
 At surface: 625.6 West of EAST & 1890 North of South Line
 At proposed prod. zone: SAME or within 50' NESE

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)
 625.6

16. NO. OF ACRES IN LEASE
 360

17. NO. OF ACRES ASSIGNED TO THIS WELL

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.

19. PROPOSED DEPTH
 1050'

20. ROTARY OR CABLE TOOLS

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 4508 GR Buckhorn

22. APPROX. DATE WORK WILL START*

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
9 5/8"	7 5/8"	26.4#	120	TO SURFACE
6 1/4"	4 1/2"	9.5	T.D.	400' above highest water or producing hydrocarbon zone

Surface MANCOS
 DAKOTA 760
 Cedar mt 900
 Buckhorn 1050

APPROVED BY THE DIVISION OF OIL, GAS, AND MINING
 DATE: 2/9/82
 BY: CB Fein

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program if any.

24. SIGNED: Dean Christ TITLE: Mgr. DATE: 1-20-82

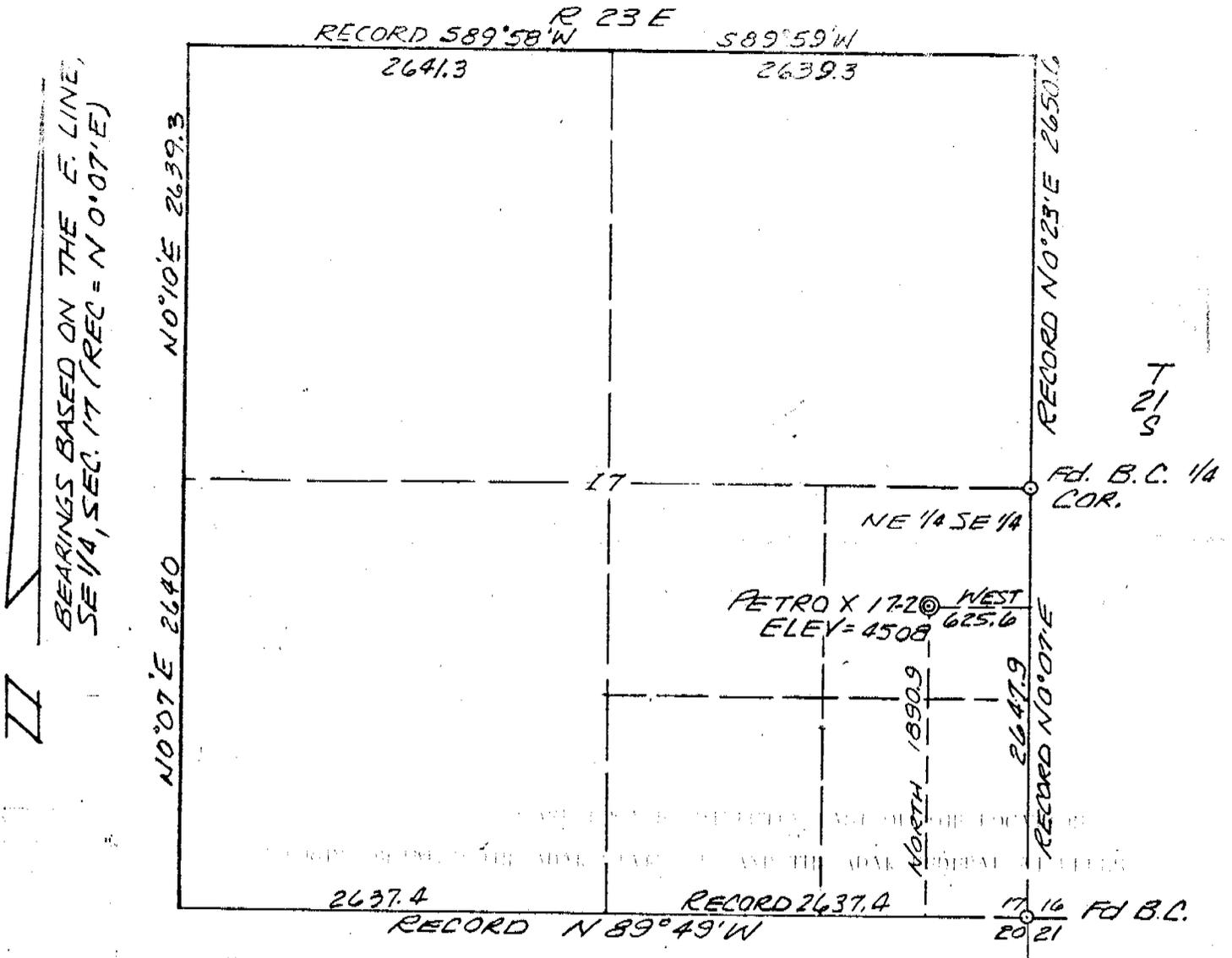
(This space for Federal or State office use)

PERMIT NO. 43-015-30715 APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

WELL LOCATION PLAT



FOR: DEAN CHRISTENSEN

WELL LOCATION PLAT
"PETRO X 17-2"
"IN"

NE 1/4 SE 1/4, SEC. 17, T 21S,
R 23E, SLB 4M, GRAND CO, U.
SCALE 1"=1000' DEC 4, 1981
TRANSIT & EDM SURVEY

ELEV. BY VERTICAL ANGLES
FROM U.S.G.S. TOPO QUAD,
"CISCO, UTAH" 1958 (E 1/4
CORNER SEC 17 = 4488)



John L. Keogh
JUTAH R.L.S. N°1963

BY: J. L. Keogh

25X8

W R

125'

175'

17-2 Rig Layout & Drill Pad

E

206'

Pit

Blowie Line

Pit
25X8

RIG

Pit
3X3

200'

W

175'

17-2 Rig Layout & Drill Pad

E

W

SIGSMIL ROAD

SIGSMIL ROAD

W

RECEIVED
OIL AND GAS DIVISION

Minerals Management Service
Oil and Gas Operations
2000 Administration Building
1745 West 1700 South
Salt Lake City, Utah 84104
FEB 25 1982
SALT LAKE CITY, UTAH

NEPA CATEGORICAL EXCLUSION REVIEW

PROJECT IDENTIFICATION

Operator CC Co.
Project Type Gas Well - Development
Project Location 625' FEL & 1890' FNL - Section 17, T. 21S, R. 23E
Well No. 17-2 Lease No. U-16964-A
Date Project Submitted February 2, 1982

FIELD INSPECTION

Date February 18, 1982

Field Inspection
Participants

Craig Hansen - MMS, Vernal
Elmer Duncan - BLM, Moab
Kevin Cleary - BLM, Moab
Paul Brown - BLM, Moab
Dean Christensen - CC Co.

Related Environmental Documents: _____

I have reviewed the proposal in accordance with the categorical exclusion review guidelines. This proposal would not involve any significant effects, and, therefore, does not represent an exception to the categorical exclusions.

2-22-82

Date Prepared

Craig Hansen
Environmental Scientist

I concur

FEB 25 1982

Date

WJ Mauter

District Supervisor

FOR E. W. GYNN
DISTRICT OIL & GAS SUPERVISOR

CATEGORICAL EXCLUSION REVIEW COMMON REFERENCE LEGEND

1. Surface Management Agency Input
2. Reviews Reports, or information received from Geological Survey
(Conservation Division, Geological Division, Water Resource Division,
Topographic Division)
3. Lease Stipulations/Terms
4. Application Permit to Drill
5. Operator Correspondence
6. Field Observation
7. Private Rehabilitation Agreement

RECOMMENDED STIPULATIONS FOR CC CO. WELL #17-2:

1. The access road will be maintained to allow safe travel.
2. Production facilities will be maintained and painted a color to blend in with the natural surroundings.
3. Flowlines crossing the road will be buried to allow safe access.
4. A low water crossing will be placed on the drainage located on the proposed access road.
5. The operator will adhere to BLM surface stipulations.



United States Department of the Interior

IN REPLY REFER TO

3109
(U-068)

RECEIVED
BUREAU OF LAND MANAGEMENT

Moab District FEB 25 1982
Grand Resource Area
P.O. Box 1600 SALT LAKE CITY, UTAH
Moab, Utah 84532

FEB 24 1982

Memorandum

To: Minerals Management Services
Oil & Gas Operations
P.O. Box 1037
Vernal, Utah 84078

From: Area Manager, Grand

Subject: CC Company (APD)
Petrox - 17-2, Lease #U-16964A
NE/SE, Section 17, T. 17 S., R. 23 E. SLB&M
Grand County, Utah

On February 19, 1982 a representative from this office met with Cody Hansen, MMS, and Dean Christensen, agent of the CC Company for an inspection of the above referenced location. Subject to the attached conditions and written approval from MMS, I am approving the surface management portion of the Application for Permit to Drill.

The archaeological requirement has been fulfilled on this location. No threatened or endangered flora or fauna are indicated in the area.

Please forward the enclosed information to CC Company.

Enclosures: (4)
1-Reclamation Procedures
2-Seed Mixture
3-Suggested Colors - Production Facilities
4-Survey & Design Class III Roads



Save Energy and You Serve America!

Company: CC Company
Well: Petrox - 17-2
Section: 17, T. 21 S., R. 23 E.

ADDITIONS TO THE MULTIPOINT
SURFACE USE PLAN
AND
RECLAMATION PROCEDURES

CONSTRUCTION:

- 1) The operator or his contractor will contact the Grand Resource Area Office in Moab, Utah (phone (801) 259-6111) 48 hours prior to beginning any work on public land.
- 2) The dirt contractor will be furnished with an approved copy of the surface use plan and any additional BLM stipulations prior to any work.
- 3) Use of water from sources such as wells, springs, streams or stock ponds for activities associated with this well will be approved, prior to use, by the agency or individual holding the water right.
- 4) If subsurface cultural material is exposed during construction, work in that spot will stop immediately and the Grand Resource Area Office will be contacted. All employees working in the area will be informed by the operator that they will be subject to prosecution if they are caught disturbing archaeological sites or picking up artifacts. Salvage or excavation of identified archaeological sites will only be done if damage occurs.
- 5) Improvement to the existing road will be necessary. The total disturbed width allowed will be 24 feet. The allowable travel surface will be 16 feet. Road stipulation in right-of-way U-50126 will be adhered to.

New road construction on Lease #U-16964A will be limited to an allowable travel surface width of 16 feet with a total disturbed width of 24 feet. For construction design and survey refer to class III road standards attachment. Low water crossings will be constructed in each drainage channel the road crosses. The road will follow an existing seismograph road from section 16 west to the well location.

Surface disturbance and vehicular travel will be limited to the approved location and approved access route. Any additional area needed will be approved in advance.

Surface material will not be placed on the access road or location without prior BLM approval.

6) Location: Pad size will be as designed in the 13 point plan. Disturbed area will be where the rig will be and the pit. Pit will be 25 feet long x 8 feet wide x 5 feet deep, and fenced on 4 sides with 48 inch hog wire prior to drilling.

7) The top 6 inches of soil material will be removed from the area to level the drilling rig and preserved to be replaced as needed.

PRODUCTION

- 1) The reserve pit and that portion of the location and access road not needed for production or production facilities will be reclaimed in the methods described in the rehabilitation section. All of the stockpiled topsoil will be used in reclaiming the unused areas.
- 2) All above-ground production facilities will be painted using the attached suggested colors.
- 3) The access will be to the design of a class III road.
- 4) Access road from Section 16 west to the location will follow an old seismograph road.

REHABILITATION

- 1) Immediately upon completion of drilling, the location and surrounding area will be cleared of all debris resulting from the operation. All trash will be disposed of in the trash pit. Pit will be fenced and deep enough so it will be covered with at least 4 feet of soil prior to removal of the drilling rig.
- 2) The operator or his contractor will contact the Grand Resource Area BLM office in Moab, Utah, phone (801)259-6111), 48 hours prior to starting rehabilitation work that involves earthmoving equipment and upon completion of restoration measures.
- 3) Before any dirt work to restore the location takes place, the reserve pit must be completely dry and any trash (barrels, metal etc.) it contains must be removed from public lands.
- 4) All disturbed areas will be recontoured to blend as nearly as possible with the surrounding area.
- 5) The stockpiled topsoil will be evenly distributed over the disturbed area.
- 6) All disturbed areas will be scarified with the contour to a depth of 6 inches. Do not smooth pads out, leave a roughened surface. Area ripped and seeded will be any part of the pad that was disturbed by leveling or vehicular use.
- 7) Seed will be (broadcast/drilled) at a time to be specified by the BLM with the following seed prescription. When broadcast seeding, a harrow or some such implement will be dragged over the seeded area to assure seed cover. Broadcast-seed will be applied at two times the amount shown on the enclosed seed mixture.
- 8) After seeding is complete the access will be blocked to prevent any use.
- 9) Waterbars will be used as needed on all sloping surfaces as shown below:

Grade

2%
2-4%
4-5%
+5%

Spacing

200 ft. spacing
100 ft. spacing
75 ft. spacing
50 ft. spacing

SEED MIXTURE

<u>Species</u>		<u>Rate</u> <u>lbs/acre</u>
<u>Grasses</u>		
Oryzopsis hymenoides	Indian rice grass	1
Hilaria jamesii	Curley grass	1
<u>Forbs</u>		
Sphaeralcea coccinea	Globemallow	1
<u>Shrubs</u>		
Atriplex nuttallii cuneata	Nuttall saltbush	1
Ceretoides lanata	Winterfat	1
	Total	<u>5</u>

Broadcast seed will be applied at double the above rate.

Seeding will be done in the fall of the year (Oct.- Dec.)



United States Department of the Interior

IN REPLY REFER TO

BUREAU OF LAND MANAGEMENT

SUGGESTED COLORS TO PAINT OIL & GAS PRODUCTION FACILITIES

Cisco Desert and Flats below the Bookcliffs:

Dynasty Green	(Sears)
Tumbleweed	(Pratt & Lambert)
Desert Tan	-----
Sage Gray	(Pratt & Lambert)

Bookcliffs Region:

Sage Gray	(Pratt & Lambert)
Sea Life	(Pratt & Lambert)
Dynasty Green	(Sears)

Similar hues other than the ones mentioned above must be approved by the Grand Resource Area Manager.

N T L - 6 P L A N R E P O R T

For

Well Name: PETRO X 17-2

Location: 1890.0' North of the South Line, 625.6' West of the East Line
Section 17, T21S, R23E East, Grand County, Utah

1. Existing Roads: (See attached Maps)

A. Well Location: (See Plat #1)

Reference Stakes: See attached Exhibit

Perimeter Stakes: ON LOCATION

B. Route and Distance to Well Site From Reference Point: (See att. maps)

See attached Exhibit

C. Access Roads (Identify secondary roads to be used): (See att. maps)

Roads currently exist to the location which ABE described as follows and are referenced on the attached plats and exhibits. The access route to the location exist via the east-west route from the Cunningham Ranch Road, and then follows the road which turns into the ADAK State #1 Well on the State acreage in Section 16, T21S, R23E. An old seismic road goes directly to the proposed 17-2 Site and will necessitate minimal upgrading for the drilling operations. A Road Patrol or blade will be sufficient for total access.

D. Roads Within 3 mile radius: (See att. maps) I-80, Cunningham Ranch

Road (described above)

E. Roads Within 1-mile radius: (See att. maps) See 1-D Above.

Access Road (see C)

F. Plans for Road Improvement & Maintenance: Road is currently
utilized on a daily basis. No upgrading is planned or is necessary,
periodic leveling will be done as necessary. The old seismic road
is not used daily, but all other access routes are used on a daily basis.

2. Planned Access Roads: (See att. maps) ONLY UPGRADE THE SEISMIC ROAD PRESENT.

None

- (1) Width: 12'
- (2) Maximum Grades: 4.0%
- (3) Turnouts: NONE NEEDED
- (4) Drainage Design: AS DIRECTED. OPERATOR FEELS NONE NEEDED.
- (5) Location and Size of Culverts, Cuts, and Fills: NONE, OTHER THAN PIT
AS DIRECTED BY ON SITE INSPECTION
- (6) Surfacing Material: _____
- (7) Gates, Cattleguards, or Fence Cuts: N/A
- (8) All new roads have been flagged as required. N/A AS THE ROUTE IS
VISIBLE AND WELL DEFINED. FLAGGING HAS BEEN PLACED.

3. Location of Existing Wells: (See Map No. 2)

- (1) Water Wells: N/A
- (2) Abandoned Wells: See map
- (3) Temporarily Abandoned Wells: N/A
- (4) Disposal Wells: N/A
- (5) Drilling Wells: N/A
- (6) Producing Wells: Vuk #8, Sec 4; OTHF 7-11, Sec. 11
- (7) Shut-in Wells: State #1, SE $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 16, ADAK #4 Sect 17
- (8) Injection Wells: N/A
- (9) Monitoring or Observation Wells: N/A

4. Location of Existing and/or Proposed Facilities:

A. Within 1-mile radius of location show the following existing facilities owned or controlled by lessee/operator:

- (1) Tank Batteries: (Size) None

- (2) Production Facilities: N/A
- (3) Oil gathering lines: N/A
- (4) Gas gathering lines: ARE LOCATED DIRECTLY EAST OF THE LOCATION AND RUNS BETWEEN THE ADAK STATE #1, AND THE ADAK FEDERAL #4 WELLS.
- (5) Injection lines: N/A
- (6) Disposal lines: N/A
- (7) Are lines buried? N/A

B. If new facilities are contemplated, in the event of production, show: (These facilities depend on the outcome of the proposed well and are really unknown at this time.) Show a general proposed plan. (See Plat No. 2)

- (1) Are any facilities planned off well pad? None
- (2) Give dimensions of facilities: N/A
- (3) Construction methods and materials: N/A
- (4) Protective measures for livestock and wildlife: Water pit is fenced

C. Plan for rehabilitation of disturbed areas no longer needed after drilling operations are completed: replant and grade as directed by

BLM

5. Location & Type of Water Supply: (See att. maps)

A. Type of Water Supply: Fresh water from Colorado River. Commercial
transports to bring in salt brines.

B. Method of Transporting Water: Commercial trucking and driller
equipment.

C. Is Water Well Planned? No
If so, describe location, depth and formation: N/A

6. Source of Construction Materials:

A. See attached map and describe: _____

B. Identify if Federal, Indian, or Fee Land: Federal Lease

C. Describe Material: (Where from and how used) _____

D. See Item 1-C and 2 above.

7. Waste Disposal:

(1) Cuttings: Bury on site

(2) Drilling Fluids: into fenced pit and then hauled off

(3) Producing Fluids: into fenced pit and then hauled off or sold

(4) Human Waste: porta potties to be utilized and then hauled from location.

(5) Garbage & Other Waste: (Burn pit will be adequately fenced, prior to commencing of drilling with chicken wire to prevent scattering of debris by wind) All burnable waste to be burned and buried. All other waste removed to the Cisco dump.

(6) Clean-up: (See Item 10 below)

8. Airstrips and/or Camp Site (Describe): Airstrip located at Cisco townsite. Camper vehicles to be used on site.

9. Well Site Layout: (See Plat No. 3)

(1) Describe cuts or fills: None planned, just level as necessary for rig placement.

(2) Describe pits, living facilities, soil stockpiles: Any topsoil removed to be stacked on north edge of pad for later rehabilitation. See Exhibit for pit location.

(3) Rig Orientation, Pipe Rack, Access Road Entrance, etc.: (See Plat #3)

(4) Are Pits Lined? No

10. Plans for Restoration:

A. If Well is completed: Replant all areas not necessary for production.

B. If Well is abandoned: Restored as directed.

- (1) Removed: _____

- (2) Seeding location and access road: N/A

- (3) Will pits be fenced or covered? Fenced

- (4) Is there any oil in reserve pit? No
If so, describe disposal: N/A

- (5) When will restoration work be done? As directed or upon completion
and determination of the status of the well.

11. Description of Land Surface:

- (1) Topography & Surface Vegetation: Rolling mancos with sage area
mostly barren.

- (2) Other Surface Activities & Ownership: _____

- (3) Describe other dwellings, archeological, historical, or cultural sites: None

12. Operators Representatives: (Address & Phone Number)

Dean H. Christensen 801 262-4422

3964 South State

Salt Lake City, Utah 84107

13. Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the drill site and access route; that I am familiar with the conditions which presently exist; that statements made in this plan are, to the best of my knowledge, true and correct; and that work associated with the operations proposed herein will be performed by CCO and its contractors in conformity with this plan and terms and conditions under which it is approved.

Date: 1-20-82

Name: Dean Hunt

Title: Operator

7-POINT WELL COMPLETION PROGRAM

1. CASING:

Operator will set and cent three (3) joints of J-55, 26.4# 7 5/8" Surface casing into the calcareous zone of the Mancos shale. A string of 4½", 9.5# casing will be run from the surface to total depth and cemented thru the pay zone. An oil Saver Tool will be used during logging, perforating and during swabbing.

2. CASING HEAD AND FLANGES:

A Hercules wellhead will be installed on the 4½" casing. The complete head is a S W Type 4½"- 2 3/8" with two 2" pipe outlets, tested to 2000 pounds. A 2", 750 WOG valve will be installed on the outlet ports, and a 2000# high pressure gate valve will be installed on the 2 3/8" stubing and a permanent line choke will be installed on the flow line to any separator which may be installed. The 7 5/8" surface casing will be flanged to receive a Spherical or Ram type BOP. The type utilized will depend upon availability at the time of drilling. A grant Rotating head will be installed on top of the BOP.

3. INTERMEDIATE CASING:

NON-REQUIRED

4. BLOW OUT PREVENTER:

As stated in #2 above, either a NL-Shaffer Spherical or ram-type BOP will be utilized. Two (2) fill and kill line ports will be welded onto the surface casing below the Blow-out preventer to enable the operator to pump directly into the surface casing and by-pass the equipment installed above.

5. AUXILLIARY EQUIPMENT:

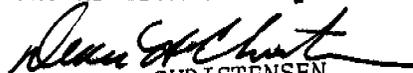
A 3½" sub with w' valve outlet will be stubbed into the drill pipe for testing and cementing.

6. BOTTOM HOLE PRESSURE:

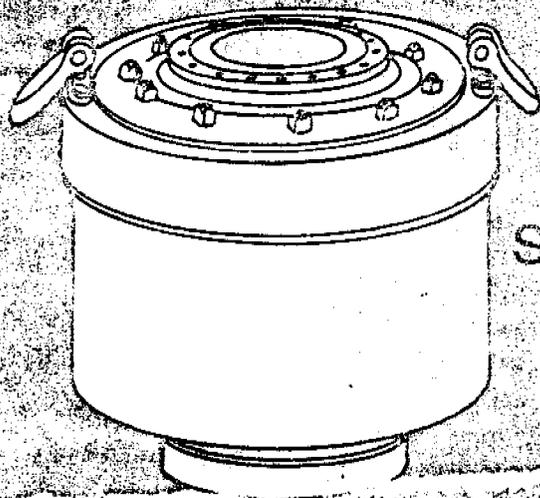
The well being drilled under the terms and conditions of this application we drilled and originally tested to pressures which did not exceed 650#. The Operator is prepared for pressures up to 1000#. (The pressures also are further collaborated by pressures from other wells within one-mile in radius from the proposed location).

7. DRILLING FLUIDS:

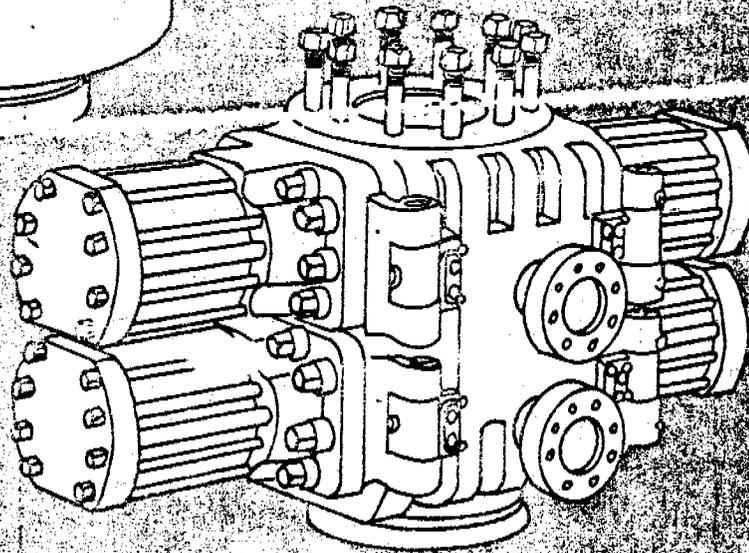
The Operator will drill surface hole with compressed air. In the event that water is encountered which cannot be handled by the on site air compressors, a gel based drilling mud will be utilized to complete the surface hole. The "production hole will be drilled with Compressed Air/Air Mist until water or Oil is encountered at which time the Operator will utilize a salt-based polymer. Weighted brine will be transported from Moab, Utah via tanker to the site as necessary. The Operator will have on sufficient materials and water to provide for twice the hole capacity at TD. Additional mud reserves are available within one hr from either Grand Jct., Colorado, or Moab, Utah upon notification.


DEAN H. CHRISTENSEN
CCCo

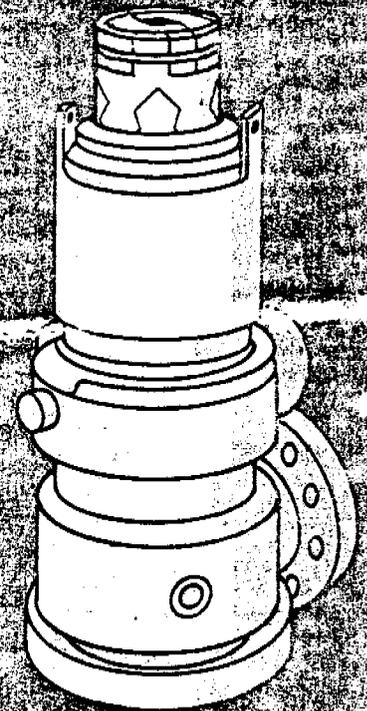
Blowout Preventers



Spherical



Ram-Type



Floating

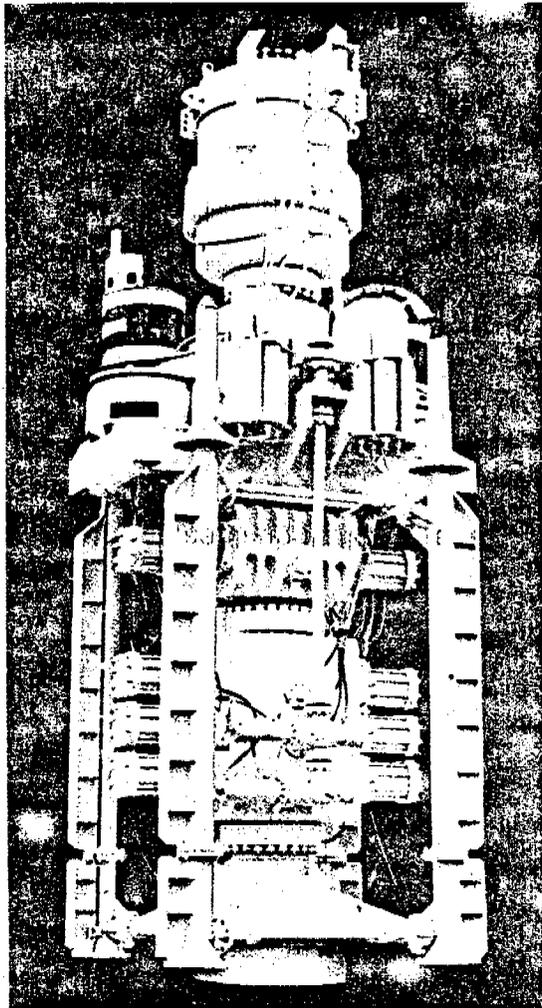
NL Shaffer



NL Shaffer/NL Industries, Inc.

You Can Depend on Well-Proven NL Shaffer BOP's

NL Shaffer blowout preventers are noted for their reliability. From the sub-zero cold of the North Slope to the sticky heat of tropical jungles, drilling contractors depend on these rugged BOP's for positive sealing . . . well after well.



NL Shaffer BOP stacks are shorter than most others because of the simple, compact design of both Spherical (annular) and ram-type NL Shaffer preventers. The company can furnish a BOP stack to suit the particular needs of practically any drilling operation. For example, the subsea stack above has a dual Spherical preventer (two independently-operating Sphericals in one unitized body) and two ram-type preventers — a triple (three sets of rams in one housing) and a single. The land stack at right has a single Spherical and two ram-type BOP's.

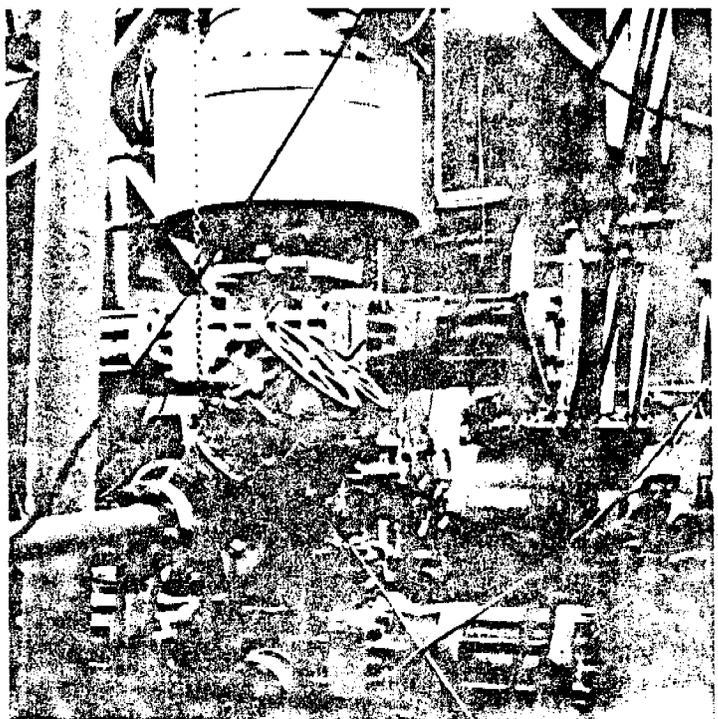
There are a number of different types of blowout preventers, each with its specific uses, but the most widely used are the annular BOP, the ram-type BOP and the rotating BOP.

Annular blowout preventers, such as the NL Shaffer Spherical BOP, are sometimes referred to as universal BOP's because they can seal on almost any shape or size — kellys, tool joints, drill pipe, drill collars, casing or wireline — as well as close on an open hole.

Ram-type blowout preventers, such as the NL Shaffer SL, LWS and LWP BOP's, can be equipped with pipe rams, which seal around a specific size of pipe and, in some cases, suspend the pipe in the hole; and blind rams, which close off an open well bore. In addition, shear rams, which can cut the pipe in the hole and seal the well bore, are available in many ram-type BOP's.

Rotating blowout preventers, such as the NL Shaffer Type 50, seal around the kelly while drilling with back pressure and can also be used to strip pipe in or out of the hole, function as bell nipples or completely seal the top of the well bore.

Two or more types of preventers are often used in conjunction with one another in a BOP stack. In addition to the BOP's, the stack includes necessary hydraulic equipment, piping, valves, connectors and controls.



There's an NL Shaffer Spherical for Every Application

An NL Shaffer Spherical blowout preventer has just five major parts — the upper and lower housings, the sealing element, an adapter ring and a piston. This simple design provides a rugged, reliable preventer that is easily serviced in the field.

Strong, Simple Construction

Ring forgings are used for the housings, piston and adapter ring. Their basic circular shape, combined with the circumferential flow lines in the forging, gives them greater strength to resist the hoop stresses imposed in service.

Spherical models in smaller sizes or with lower working pressures have bolted covers, while those in larger sizes or with higher working pressures have wedge covers. In bolted-cover models, the upper housing is fastened to the lower with studs and nuts. On wedge-cover models, locking segments and a locking ring are used.

Space-Saving Configuration

NL Shaffer Sphericals save space because of the piston's compact design. Single Sphericals are 10 to 20 percent shorter than most other annulars — a big advantage when installation space is limited.

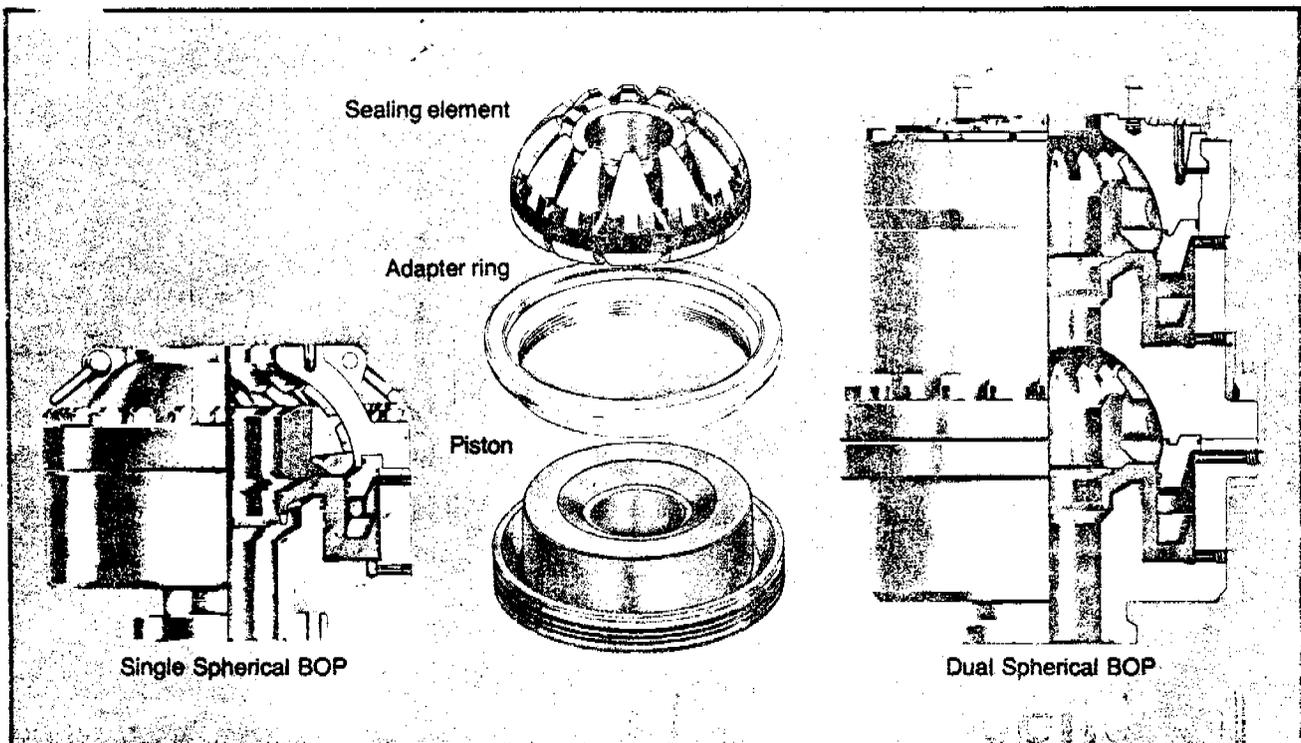
For applications that require two Sphericals, dual wedge-cover preventers incorporate two sealing elements, adapter rings and pistons into one assembly. Each sealing element operates independently of the other, just as if they were singles, yet the dual preventer is up to 20 percent lower than two singles stacked one on top of the other.

Special Lightweights

NL Shaffer also makes special lightweight single Sphericals for airlifting to remote drill sites. These lightweights are as much as two tons lighter than regular-weight Sphericals and readily break down into components no heavier than 4,000 pounds to fit a helicopter payload.

Suitable for H₂S and Arctic Service.

A standard Spherical meets all applicable American Petroleum Institute (API) and National Association of Corrosion Engineers (NACE) requirements for internal H₂S service and can easily be fitted for external H₂S service as well. Field conversion for external H₂S service involves only changing the studs, nuts and lifting shackles. Also available are Arctic models which meet API 6A specifications for low temperature service.



Spherical Blowout Preventer Other Annulars—on Land

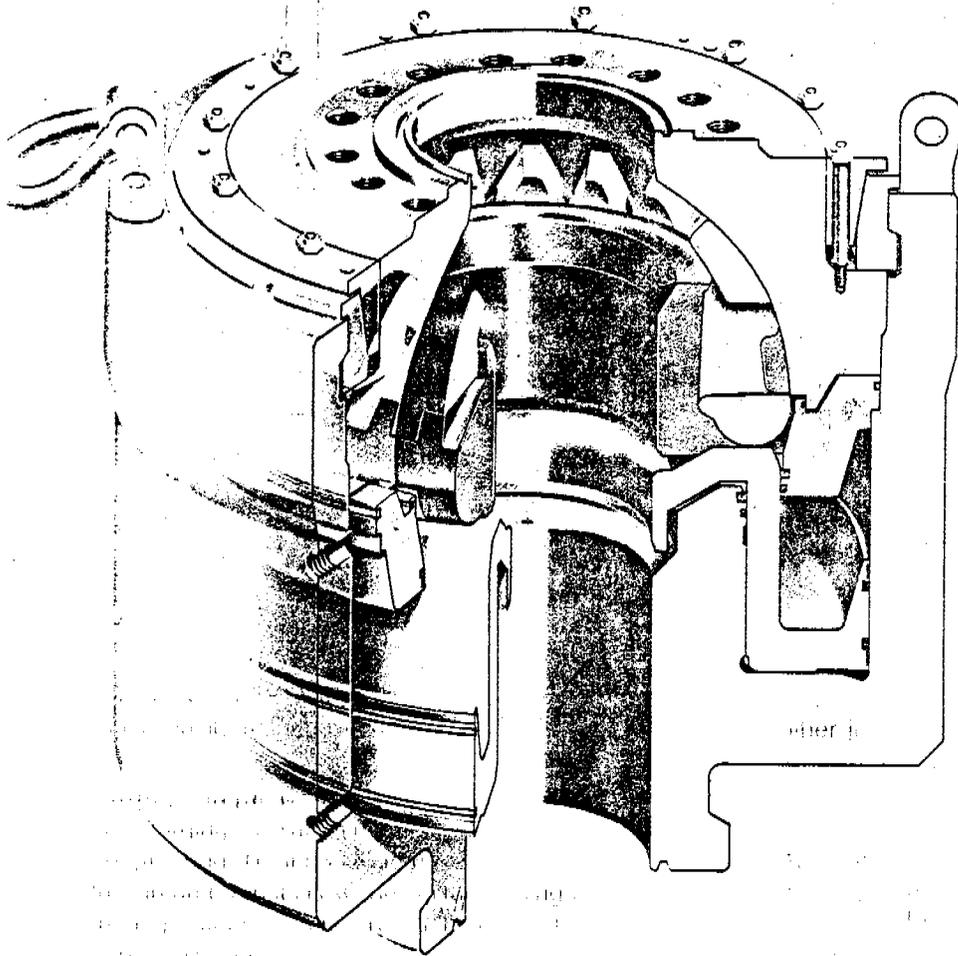
The unique sealing element in NL Shaffer Sphericals is designed for long life at full working pressure. Impartial industry tests sponsored by 22 companies, including all major BOP manufacturers, have shown that it ordinarily lasts two to four times longer than the elements in the other annular preventers tested and also retains its ability to return to the full open position much longer. Detailed information on the tests is available from your NL Shaffer representative or the company's home office in Houston. This long sealing element life is the most significant advantage of Sphericals, giving them a high degree of reliability and keeping operating and maintenance costs to a minimum.

Long Stripping Life

Only the top portion of the rubber in the Spherical's sealing element contacts the drill string or kelly. Most of the rubber is held in reserve, to be used for sealing only as abrasion makes it necessary. This large reservoir of rubber makes it possible to strip into or out of a deep hole without replacing the element during the trip. Abrasion is minimal because of the unique design of the sealing element and its closing mechanism.

Simple Hydraulic System

Only two hydraulic connections are needed on an NL Shaffer Spherical — one for opening and one for closing. On some of the larger Sphericals, additional ports are provided for convenience when attaching hydraulic lines.



In full open position, the packing element is at a maximum I.D. and completely relaxed, with its steel segments positioned away from the well bore. To close the element, operating fluid is pumped in below the piston, forcing the piston forward against the element, which moves inward until it seals against the drill string or itself.

Reliable NL Shaffer Ram Have Floating Rams — S

NL Shaffer Ram-Type Blowout Preventers are available in three basic models — the SL, the LWS and the LWP. SL models are made in the larger bore and higher working pressure sizes used in subsea and deep drilling applications. LWS models are used primarily in land operations and LWP models are used chiefly for production and workover applications.

The floating ram design used in all three models deserves much of the credit for the way these reliable preventers continue to seal even after years of use have opened the tolerances between the ram cavity and the ram blocks. When the rams are closed, any pressure in the well actually assists sealing by pushing the floating ram blocks upward against the sealing surface in the ram cavity.

Designed for Long Life

When the rams are open, the bottoms of the ram blocks rest on guide ribs and the tops are clear of any contact with the ram cavity, so there is no compression of the top sealing surfaces on the ram rubbers. Throughout most of the ram travel, the tops of the guide ribs are the only point of contact between the ram cavity and the rams, so wear is minimal.

Rams are easily removed from the opened doors, even in tall BOP stacks. In double and triple BOP's, the bottom doors swing out from under the upper cylinders so that a hoisting line can be attached directly to the ram blocks for easy handling.

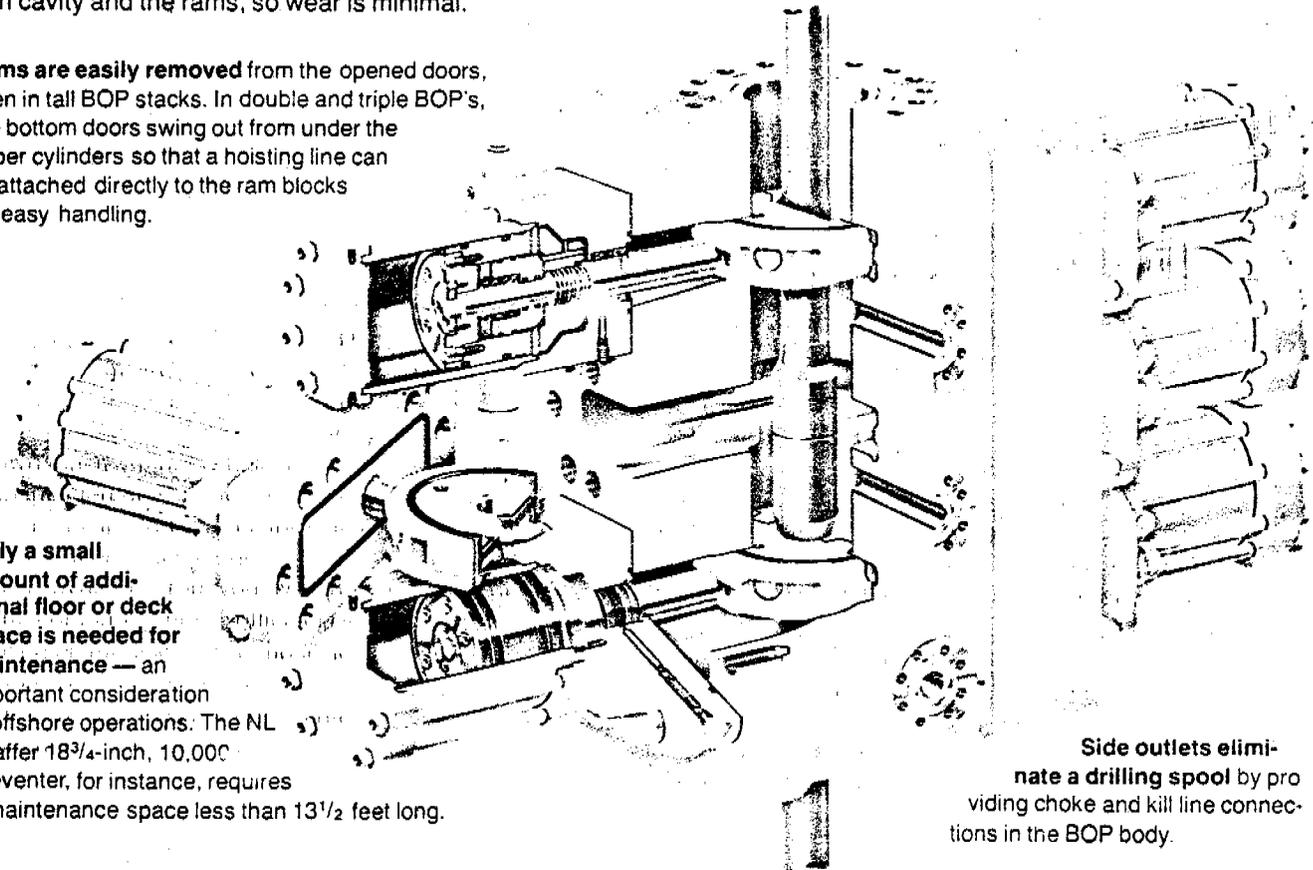
Only a small amount of additional floor or deck space is needed for maintenance — an important consideration in offshore operations. The NL Shaffer 18³/₄-inch, 10,000 psi preventer, for instance, requires a maintenance space less than 13¹/₂ feet long.

The rubber does not contact the ram cavity until the rams are nearly closed. As the rams meet, the rubbers are squeezed upward against the raised sealing surface at the top of the ram cavity. Because the floating ram design minimizes rubber wear, and because a very durable compound is used, the ram rubbers have a long life.

Only the sealing surface and portions of the top of the guide ribs are machined. This makes the Shaffer ram cavity less subject to damage and the preventer much easier to repair than those preventers in which the entire ram cavity must be machined because of close tolerances between rams and cavity throughout the ram travel.

No Mud or Sand Fouling

In Shaffer ram-type BOP's, the bottom of the ram cavity, between the guide ribs, is steeply sloped to allow mud and sand to drain back into the well bore, and the top slopes upward so there is no close tolerance that could be fouled by mud or sand. This keeps the ram cavity free of caked mud and debris so that the rams are always ready to function.



Side outlets eliminate a drilling spool by providing choke and kill line connections in the BOP body.

Type BOP's Strong, Compact Bodies

Easy Maintenance

Each ram and its operator are completely self-contained and mounted on a hinged door which unbolts and swings open for inspection or changing of rams. The hydraulic lines are attached to the hinges, so there is no need to break or remake connections and no loss of hydraulic fluid. Rams can be operated with the doors open to test the hydraulic system or to inspect ram shafts and ram shaft seals.

Relatively low torque requirements for bolts are another aid to easy ram changing and maintenance. The maximum torque required on a Shaffer ram BOP is 6,600 foot pounds, which can be achieved by the impact wrenches found on most rigs. Other ram preventers with fewer bolts require much greater torque for ram changing.

Light, Low-Profile Bodies

Shaffer ram-type preventers have deep-ribbed bodies cast from alloy steel. They are very strong, yet light in weight and compact — qualities which make them ideal for subsea stacks, use under low substructures on land rigs and other applications where space is at a premium. By casting the bodies, a more intricate shape can be used to save weight and height. NL Shaffer unitized double and triple BOP's, which combine two or three ram compartments into one body, are as much as 30 percent lower than double and triple preventers fabricated by welding single BOP's together.

Suitable for H₂S Service

Standard Shaffer ram-type preventer bodies meet all API and NACE specifications for internal and external

H₂S service — no special fabrication is necessary.

Only the cap screws, pipe plugs, studs and nuts need to be changed to trim the preventer for external H₂S service. Pipe and blind rams are also available for H₂S service.

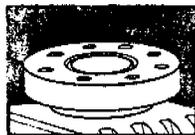
Arctic Models Available

Shaffer Arctic model ram preventers meet API 6A specifications for low temperature service.

Interchangeable Rams

All NL Shaffer preventers can be equipped with pipe and blind rams. Shear rams are available in preventers most frequently used in offshore operations. The rams are interchangeable with one another and, because of the preventers' hinged doors, are easy to switch when requirements change.

Rams with R_c22 maximum-hardness steel are available which will support a 600,000-pound drill string load and seal throughout their rated pressure range when a tool joint with an 18° taper is lowered onto the closed rams. A patented, H₂S-compatible inlay welded around the bores of the ram blocks supports the load.



Most NL Shaffer ram BOP's can be ordered with flanged, hubbed or studded end connections and side outlet connections. That makes it possible to reduce the height of the preventer stack by using flanged connections on studded connections. Many other ram-type preventers are not available with studded connections, which increases stacking height significantly.

** FILE NOTATIONS **

DATE: 2-5-82

OPERATOR: 6 C Co.

WELL NO: Cisco Area 17-2

Location: Sec. 17 T. 21S R. 23E County: Grand

File Prepared:

Entered on N.I.D:

Card Indexed:

Completion Sheet:

API Number 43-019-3915

CHECKED BY:

Petroleum Engineer: _____

Director: OK as per order in Cause 102-166

Administrative Aide: ~~As per rule C-3(c)~~ As Per Order Below

APPROVAL LETTER:

Bond Required: 9-20-79

Survey Plat Required:

Order No. 102166 ~~77766~~

O.K. Rule C-3

Rule C-3(c), Topographic Exception - company owns or controls acreage within a 660' radius of proposed site

Lease Designation Prod.

Plotted on Map

Approval Letter Written

Hot Line

P.I.

February 9, 1982

C C Company
3964 South State
Salt Lake City, Utah 84107

RE: Well No. Cisco Area 17-2
Sec. 17, T. 21S, R. 23E
Grand County, Utah

Insofar as this office is concerned, approval to drill the above referred to gas well is hereby granted in accordance with the Order issued in Cause No. 102-B dated September 26, 1979.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

CLEON B. FEIGHT - Director
Office: 533-5771
Home: 466-4455

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling. Your cooperation in completing this form will be appreciated.

Further, it is requested that this Division be notified within 24 hours after drilling operations commence, and that the drilling contractor and rig number be identified.

The API number assigned to this well is 43-019-30915.

Sincerely,

DIVISION OF OIL, GAS AND MINING


Cleon B. Feight
Director

CBF/as
Encl.
cc: 886S

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

NAME OF COMPANY: C C COMPANY

WELL NAME: PETRO X 17-2

SECTION 17 TOWNSHIP 21S RANGE 23E COUNTY Grand

DRILLING CONTRACTOR Zimmerman

RIG # 2

SPUDDED: DATE 2-27-82

TIME 1:25PM

HOW Cable

DRILLING WILL COMMENCE _____

REPORTED BY Dean Christensen

TELEPHONE # 268-8000

DATE 3/1/82 SIGNED AS

NOTICE OF SPUD

Company: CC Co -

Caller: Jim Messer

Phone: 355-3491

Well Number: 17-2 Petro X

Location: 17-21S-23E

County: Grand State: Utah

Lease Number: U-16964-A

Lease Expiration Date: _____

Unit Name (If Applicable): _____

Date & Time Spudded: 2-27-82

Dry Hole Spudder/Rotary: cable

Details of Spud (Hole, Casing, Cement, etc.) _____

Surface casing

Rotary Rig Name & Number: Zimmerman Cable Rig

Approximate Date Rotary Moves In: _____

FOLLOW WITH SUNDRY NOTICE

Call Received By: Al Lewis

Date: 3-1-82

**UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**
(FORM 9-329)
(2/76)
OMB 42-RO 356

**MONTHLY REPORT
OF
OPERATIONS**

Lease No. U-16964-A
 Communitization Agreement No. _____
 Field Name CISCO AREA
 Unit Name _____
 Participating Area _____
 County GRAND State UTAH
 Operator CCCo
 Amended Report

The following is a correct report of operations and production (including status of all unplugged wells) for the month of MARCH, 1982

(See Reverse of Form for Instructions)

This report is required by law (30 U.S.C. 189, 30 U.S.C. 359, 25 U.S.C. 396 d), regulation (30 CFR 221.60), and the terms of the lease. Failure to report can result in the assessment of liquidated damages (30 CFR 221.54 (j)), shutting down operations, or basis for recommendation to cancel the lease and forfeit the bond (30 CFR 221.53).

Well No.	Sec. & 1/4 of 1/4	TWP	RNG	Well Status	Days Prod.	*Barrels of Oil	*MCF of Gas	*Barrels of Water	Remarks
17-2	Sect 17 NE 1/4 SE 1/4	21S	23E	DRG	NONE	NONE	NONE	NONE	DRILLING

*If none, so state.

DISPOSITION OF PRODUCTION (Lease, Participating Area, or Communitized Area basis)

	Oil & Condensate (BBLs)	Gas (MCF)	Water (BBLs)
*On hand, Start of Month	_____	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
*Produced	_____	_____	_____
*Sold	_____	_____	XXXXXXXXXXXXXXXXXX
*Spilled or Lost	_____	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
*Flared or Vented	XXXXXXXXXXXXXXXXXX	_____	XXXXXXXXXXXXXXXXXX
*Used on Lease	_____	_____	XXXXXXXXXXXXXXXXXX
*Injected	_____	_____	_____
*Surface Pits	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	_____
*Other (Identify)	_____	_____	_____
*On hand, End of Month	_____	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX
*API Gravity/BTU Content	_____	_____	XXXXXXXXXXXXXXXXXX
Authorized Signature: <u><i>[Signature]</i></u>	Address: <u>3964 So State, SLC, Utah 84107</u>		
Title: <u>MANAGER</u>	Page _____ of _____		

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
(FORM 9-329)
(2/76)
OMB 42-RO 356
MONTHLY REPORT
OF
OPERATIONS

Lease No. U-16964-A
Communitization Agreement No. _____
Field Name CISCO AREA
Unit Name _____
Participating Area _____
County GRAND State UTAH
Operator CCCo
 Amended Report

The following is a correct report of operations and production (including status of all unplugged wells) for the month of APRIL, 1982

(See Reverse of Form for Instructions)

This report is required by law (30 U.S.C. 189, 30 U.S.C. 359, 25 U.S.C. 396 d), regulation (30 CFR 221.60), and the terms of the lease. Failure to report can result in the assessment of liquidated damages (30 CFR 221.54 (j)), shutting down operations, or basis for recommendation to cancel the lease and forfeit the bond (30 CFR 221.53).

Well No.	Sec. & 1/4 of 1/4	TWP	RNG	Well Status	Days Prod.	*Barrels of Oil	*MCF of Gas	*Barrels of Water	Remarks
17-2	Sect 17 NE 1/4 SE 1/4	21S	23E	DRG	NONE	NONE	NONE	NONE	WELL P&A ON 1 April 1982

*If none, so state.

DISPOSITION OF PRODUCTION (Lease, Participating Area, or Communitized Area basis)

	Oil & Condensate (BBLs)	Gas (MCF)	Water (BBLs)
*On hand, Start of Month	_____	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
*Produced	_____	_____	_____
*Sold	_____	_____	XXXXXXXXXXXXXXXXXXXX
*Spilled or Lost	_____	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
*Flared or Vented	XXXXXXXXXXXXXXXXXXXX	_____	XXXXXXXXXXXXXXXXXXXX
*Used on Lease	_____	_____	XXXXXXXXXXXXXXXXXXXX
*Injected	_____	_____	_____
*Surface Pits	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	_____
*Other (Identify)	_____	_____	_____
*On hand, End of Month	_____	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
*API Gravity/BTU Content	_____	_____	XXXXXXXXXXXXXXXXXXXX

Authorized Signature: [Signature] Address: 3964 So State, SLC, Utah 84107
Title: MANAGER

ORAL APPROVAL TO PLUG AND ABANDON WELL

Operator CC Company Representative Dean Christensen 268-8000

Well No. Petro X 17-2 Location NE ¼ SE ¼ Section 17 Township 21S Range 23E

County Grand Field Greater Cisco Area State Utah

Unit Name and Required Depth _____ Base of fresh water sands _____

T.D. 1420' Size hole and Fill per sack _____ " _____ Mud Weight and Top _____ #/gal. _____

Casing Size	Set At	Top of Cement	To Be Pulled	Plugging Requirements		
				From	To	Sacks Cement
<u>7 7/8"</u>	<u>135'</u>	_____	<u>no</u>	<u>Cement from Top</u>	<u>to Bottom</u>	<u>200 Sx Haliburton</u> lite.
_____	_____	_____	_____	_____	_____	_____
<u>Formation</u>	<u>Top</u>	<u>Base</u>	<u>Shows</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

REMARKS

DST's, lost circulation zones, water zones, etc., 870'-900' Fresh water zone. (producing about 500bbls)

Approved by DB Date 4-1-82 Time 7:50 a.m. ~~XXXX~~

USGS Approval by Bill Martins

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on re-
verse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

U-16964 A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

9. WELL NO.

PETRO X 17-2

10. FIELD AND POOL, OR WILDCAT

CISCO AREA

11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREA

17, T21S, R23E

SUNDRY NOTICES AND REPORTS ON WELLS
(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL GAS WELL OTHER **DRY HOLE**

2. NAME OF OPERATOR
CCCo

3. ADDRESS OF OPERATOR
3964 South State, Salt Lake City, Utah 84107

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface **625 W of E, 1890 N of S Line, Section 17
T21S, R23E**

14. PERMIT NO. 15. ELEVATIONS (Show whether DF, RT, GR, etc.)
4508

12. COUNTY OR PARISH **GRAND** 13. STATE **UTAH**

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF
FRACTURE TREAT
SHOOT OR ACIDIZE
REPAIR WELL
(Other)
PULL OR ALTER CASING
MULTIPLE COMPLETE
ABANDON* **XXX**
CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF
FRACTURE TREATMENT
SHOOTING OR ACIDIZING
(Other)
REPAIRING WELL
ALTERING CASING
ABANDONMENT* **XXX**
(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

WELL DRILLED TO A TOTAL DEPTH OF 1400 FT. WELL BORE FILLED FROM TOP TO BOTTOM WITH CEMENT THRU TUBING. A WELL MARKER WAS ERECTED AND THE SITE LEVELED AND RETURNED TO ORIGINAL CONTOURS BY THE OPERATOR. SITE TO BE RESEEDED IN OCTOBER 1982.

COPY OF INDUCTION ELECTRIC LOG IS ATTACHED.

WELL ABANDONED AS PER VERBAL APPROVAL OF USGS AND STATE OF UTAH.

APPROVED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING

DATE: 6/17/82
BY: [Signature]

RECEIVED

JUN 21 1982

DIVISION OF
OIL, GAS & MINING

18. I hereby certify that the foregoing is true and correct

SIGNED [Signature] TITLE AGENT DATE 6/17/82

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE

(See other instructions on reverse side)

Form approved. Budget Bureau No. 42-R355.5.

9

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL [] GAS WELL [] DRY [X] Other []

b. TYPE OF COMPLETION: NEW WELL [] WORK OVER [] DEEP-EN [] PLUG BACK [] DIFF. RESVR. [] Other P & A

2. NAME OF OPERATOR CCCo

3. ADDRESS OF OPERATOR 3964 South State, Salt Lake City, Utah 84107

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 625 W of E, 1890 N of S Line Section 17, T21S, R23E

At top prod. interval reported below 020 FEB 1891 FSL

At total depth SAME

SAME

NESB

14. PERMIT NO. 43-019-30915 DATE ISSUED 2-9-82 28 Feb 82

5. LEASE DESIGNATION AND SERIAL NO. U-U-16964A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME CISCO AREA

9. WELL NO. PETRO X-17-2

10. FIELD AND POOL, OR WILDCAT GREATER CISCO AREA

11. SEC., T., R., N., OR BLOCK AND SURVEY OR AREA Sec 17, T21S, R23E

12. COUNTY OR PARISH GRAND 13. STATE UTAH

15. DATE SPUNDED 28 Feb 82 16. DATE T.D. REACHED Apr 1, 1982 17. DATE COMPL. (Ready to prod.) P&A-- 1 Apr 82 18. ELEVATIONS (DF, REB, RT, GR, ETC.)* 4508 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD 1400 21. PLUG, BACK T.D., MD & TVD BACK TO SURFACE 22. IF MULTIPLE COMPLETIONS, HOW MANY* 23. INTERVALS OF PRODUCTION CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD) NONE 25. WAS DIRECTIONAL SURVEY MADE NO

26. TYPE ELECTRIC AND OTHER LOGS RUN ELECTRIC INDUCTION LOG 27. WAS WELL CORED NO

Table with 6 columns: CASING SIZE, WEIGHT, LB./FT., DEPTH SET (MD), HOLE SIZE, AMOUNT PULLED. Includes handwritten 'DIVISION OF OIL, GAS & MINING' and 'CEMENTED TO SURFACE'.

Table with 8 columns: SIZE, TOP (MD), BOTTOM (MD), SACKS CEMENT*, SCREEN (MD), SIZE, DEPTH SET (MD), PACKER SET (MD). Includes handwritten 'NONE'.

Table with 2 columns: DEPTH INTERVAL (MD), AMOUNT AND KIND OF MATERIAL USED. Includes handwritten 'NONE'.

33.* PRODUCTION DATE FIRST PRODUCTION N/A PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) N/A WELL STATUS (Producing or shut-in) P & A

Table with 8 columns: DATE OF TEST, HOURS TESTED, CHOKE SIZE, PROD'N. FOR TEST PERIOD, OIL—BBL., GAS—MCF., WATER—BBL., GAS-OIL RATIO. Includes handwritten 'NONE'.

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) TEST WITNESSED BY

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records SIGNED [Signature] TITLE [Signature] DATE 6-17-82

*(See Instructions and Spaces for Additional Data on Reverse Side)