

**BC Operating, Inc.**  
**Hydrogen Sulfide Drilling Operations Plan**

**Rusty Anchor 7 Federal Com #3H**

**SHL: 534' FNL & 2437' FEL of Unit Letter 'B', Section 18, T-20S, R-33E**

**BHL: 240' FNL & 2260' FEL of Unit Letter '2', Section 6, T-20S, R-33E**

**Lea County, New Mexico**

The H<sub>2</sub>S Drilling Operations Plan is submitted with Form 3160-3, Application for Permit to Drill, in accordance with BLM Onshore Oil and Gas Order Number 6 Section III.A.1., covering the above described well.

**I. Hydrogen Sulfide Training**

All personnel, whether regularly assigned, contracted or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

- A. The hazards and characteristics of hydrogen sulfide (H<sub>2</sub>S).
- B. The prior use and maintenance of personal protective equipment and life support systems.
- C. The proper use of H<sub>2</sub>S detectors, alarms, warning systems, briefing areas, evacuation procedures and prevailing winds.
- D. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

- A. The effects of H<sub>2</sub>S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
- B. Corrective action and shut in procedures when drilling or reworking a well and blowout prevention and well control procedures.
- C. The contents and requirements of the H<sub>2</sub>S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H<sub>2</sub>S zone (within 3 days or 500') and weekly H<sub>2</sub>S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H<sub>2</sub>S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

## II. H<sub>2</sub>S Safety Equipment and Systems

Note: All H<sub>2</sub>S safety equipment and systems will be installed, tested and operational when drilling reaches a depth of 500' above or three days prior to penetrating the first zone containing or reasonably expected to contain H<sub>2</sub>S (prior to drilling out of the 13 3/8" surface casing shoe for this well).

A. Well Control Equipment (All BOP and BOP equipment is shown in Drilling Plan – Exhibits 1-4).

Flare line

Choke manifold and remotely operated chokes

Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.

Auxiliary equipment to include annular preventer, mud-gas separator and rotating head.

B. Protective equipment for essential personnel:

Mark II Surviveair 30 minute units located in the dog house and at briefing areas

C. H<sub>2</sub>S detection and monitoring equipment:

2 portable H<sub>2</sub>S monitors positioned on location for best coverage and response.

These units have warning lights and audible sirens when H<sub>2</sub>S levels of 20 ppm are reached.

D. Visual Warning Systems:

Caution/Danger signs shall be posted on roads providing direct access to location.

Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate.

E. Mud Program: The mud program has been designed to minimize the volume of H<sub>2</sub>S circulated to the surface.

F. Metallurgy:

All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool kill lines, choke manifold lines and valves shall be suitable for H<sub>2</sub>S services.

G. Communication:

Company vehicles equipped with cellular telephone.

BC Operating, Inc. has conducted a review to determine if an H<sub>2</sub>S Contingency Plan is needed for this well and has determined that there is minimal potential for the accumulation for any hazardous concentration of H<sub>2</sub>S; therefore, no H<sub>2</sub>S Contingency Plan has been submitted for this well.



# **WARNING**

**YOU ARE ENTERING AN H<sub>2</sub>S AREA**

**AUTHORIZED PERSONNEL ONLY**

- 1. BEARDS OR CONTACT LENSES NOT ALLOWED**
- 2. HARD HATS REQUIRED**
- 3. SMOKING IN DESIGNATED AREAS ONLY**
- 4. BE WIND CONSCIOUS AT ALL TIMES**
- 5. CHECK WITH BC OPERATING, INC. FORMAN AT  
MAIN OFFICE**

**BC OPERATING, INC.**

**432-684-9696**

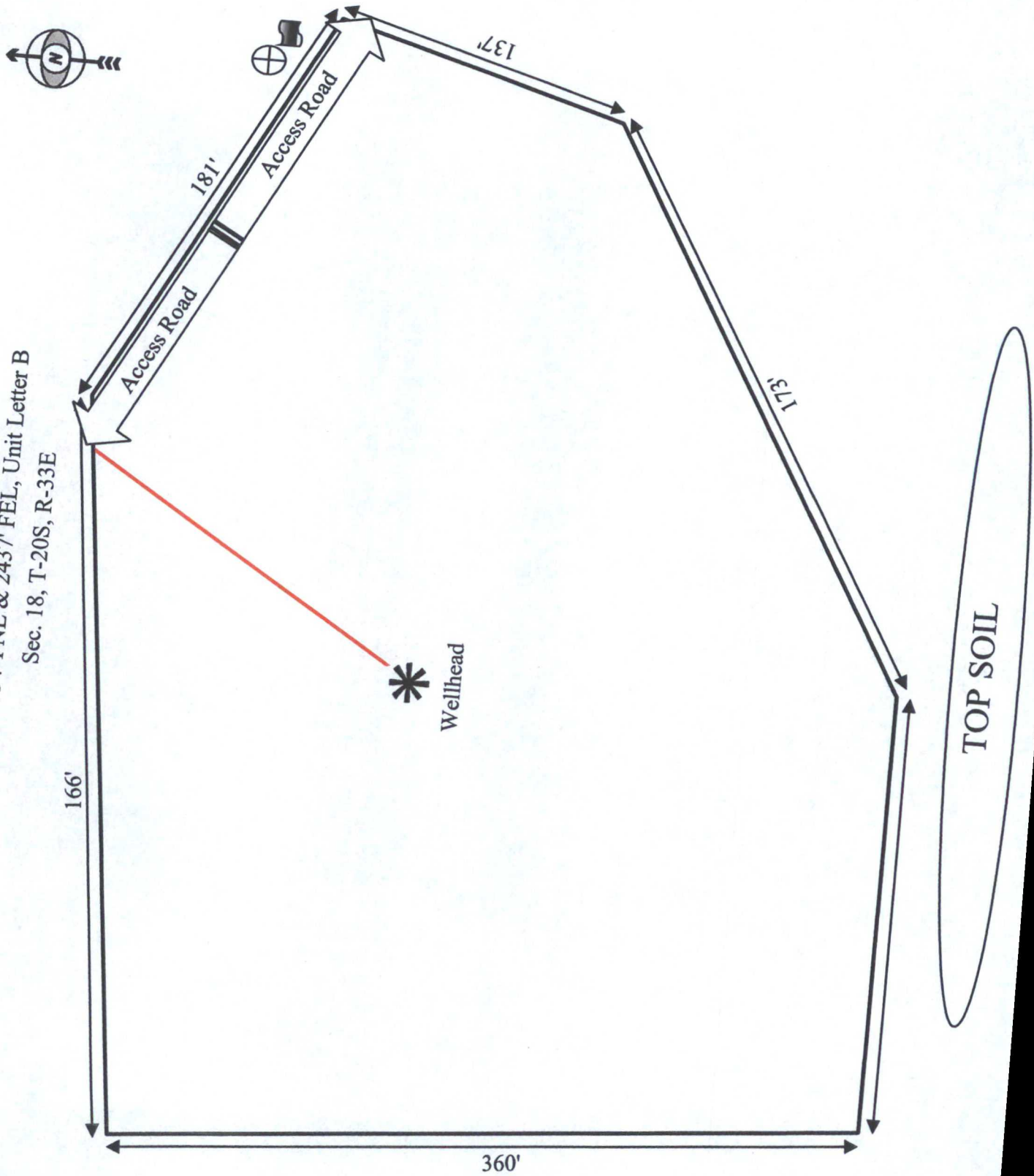
## Emergency Call List

BC Operating, Inc. Office	432-684-9696
Deane Durham	432-684-9696 (Office) 432-431-9701 (Cell)
Nic Klopp	432-684-9696 (Office) 432-422-2510 (Cell)
Bruce Madden	432-684-9696 (Office) 432-894-0721 (Cell)

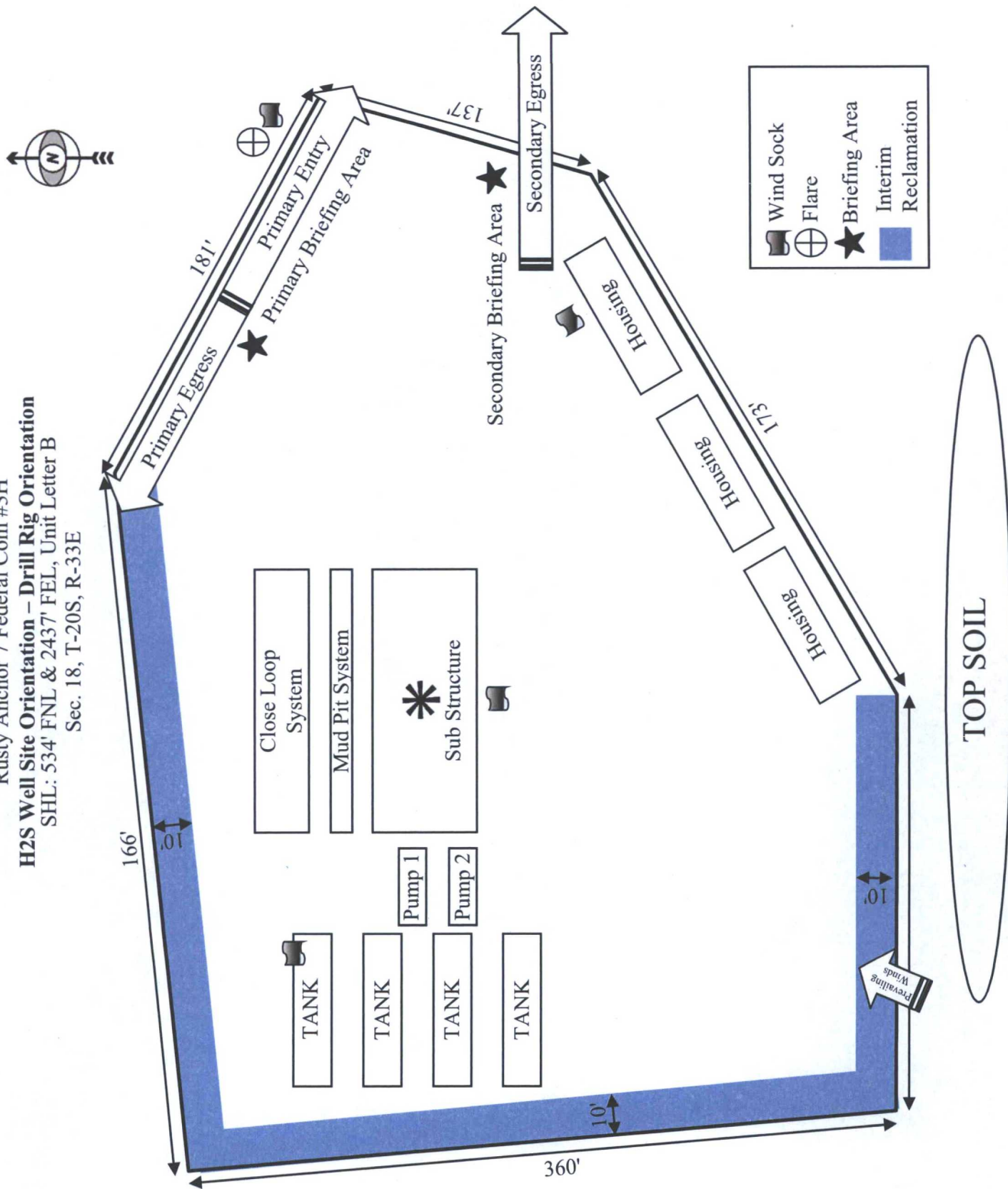
## Emergency Response Numbers

New Mexico State Police	575-392-5580
Lea County Sheriff Dept	575-396-3611
Lea Regional Medical Center	575-492-5000
Ambulance	911

**BC Operating, Inc.**  
Rusty Anchor 7 Federal Com #3H  
**Proposed Facility Diagram**  
SHL: 534' FNL & 2437' FEL, Unit Letter B  
Sec. 18, T-20S, R-33E



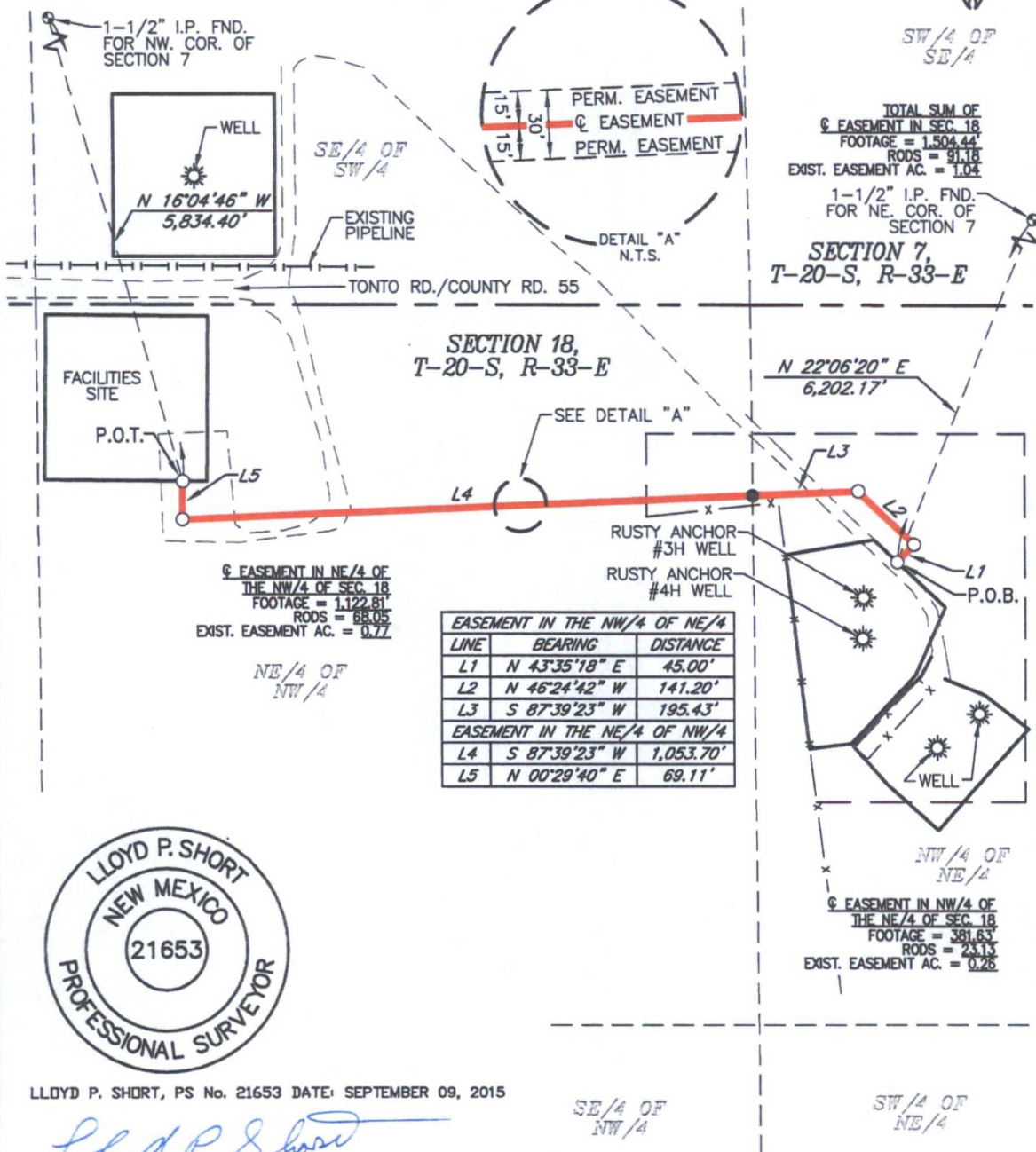
**BC Operating, Inc.**  
 Rusty Anchor 7 Federal Com #3H  
**H2S Well Site Orientation – Drill Rig Orientation**  
 SHL: 534' FNL & 2437' FEL, Unit Letter B  
 Sec. 18, T-20S, R-33E





150' 0' 150' 300'  
SCALE: 1" = 300'

EXHIBIT "A"  
LEA COUNTY, NEW MEXICO  
SECTION 18, T-20-S, R-33-E, N.M.P.M.  
RUSTY ANCHOR #3H FLOW LINE  
CERTIFICATE OF SURVEY TO ACCOMPANY  
LEGAL DESCRIPTION FOR EASEMENT



CERTIFICATION

I, LLOYD P. SHORT, NEW MEXICO PROFESSIONAL SURVEYOR NO. 21653, DO HEREBY CERTIFY THAT THIS EASEMENT SURVEY PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. I FURTHER CERTIFY THAT THIS SURVEY IS NOT A LAND DIVISION OR SUBDIVISION AS DEFINED IN THE NEW MEXICO SUBDIVISION ACT AND THAT THIS INSTRUMENT IS AN EASEMENT SURVEY PLAT CROSSING AN EXISTING TRACT OR TRACTS.

NOTE

THE EDGES OF THE EXISTING EASEMENT ARE PARALLEL WITH THE CENTERLINE OF THE EASEMENT UNTIL REACHING THE BOUNDARIES OF THE SUBJECT TRACT OF LAND.

BASIS OF BEARINGS

ALL BEARINGS AND COORDINATES REFER TO NAD 83, NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, U.S. SURVEY FEET. (ALL BEARINGS AND DISTANCES ARE GRID MEASUREMENTS.)

LEGEND		P.O.B. POINT OF BEGINNING	P.O.T. POINT OF TERMINATION
---	EXISTING ROAD	---	EDGE OF EASEMENT
---	LOT LINE	---	FENCE
---	Q EASEMENT	---	SECTION LINE
---	EXIST. PIPELINE	---	Q EXISTING ROAD
●	MONUMENT	●	QUARTER SPLIT
○	POWER POLE		

1309 LOUISVILLE AVE.  
MONROE, LA 71201



(318) 323-6900  
FAX (318) 362-0064

BC OPERATING, INC.

PLAT FOR A PROPOSED EASEMENT CROSSING THE  
PROPERTY OF

MULTIPLE OWNERS

LEA COUNTY, NEW MEXICO

REV.	DATE	DESCRIPTION	BY	CHKD

SHEET 2 OF 2

DRAWN BY: DEF

DATE: 08/31/2015

CHECKED BY: LPS

JOB NO.: R3408\_001

DWG. NO.

R3408\_001-NM-LE-0001.00000



EXHIBIT "A"

NM-LE-0001.00000  
LEA COUNTY, NEW MEXICO  
RUSTY ANCHOR #3H FLOW LINE  
PROPOSED PIPELINE  
B.C. OPERATING, INC.

SHEET 1 OF 2

FIELD NOTES DESCRIBING

*The centerline of a 30 foot wide proposed easement, being 1.04 acres of land. Said easement being located in Section 18, Township 20 South, Range 33 East, New Mexico Principal Meridian, Lea County, New Mexico.*

Being more particularly described as lying 15 feet on each side of the following described centerline:

*BEGINNING* at a point from which a 1-1/2 inch iron pipe found for the Northeast corner of said Section 7 bears, N 22°06'20" E a distance of 6,202.17 feet.

(NW/4 OF THE NE/4)

*THENCE* continue crossing the Northwest quarter of the Northeast quarter of said Section 18 the following courses and distances:

N 43°35'18" E a distance of 45.00 feet, N 46°24'42" W a distance of 141.20 feet, and  
S 87°39'23" W a distance of 195.43 feet, to the West line of the Northwest quarter of the Northeast quarter of said Section 18.

The length of the above easement is 381.63 feet (23.13 rods) and contains a total of 0.26 acres of land.

(NE/4 OF THE NW/4)

*THENCE* continue crossing the Northeast quarter of the Northwest quarter of said Section 18 the following courses and distances:

S 87°39'23" W a distance of 1,053.70 feet, and N 00°29'40" E a distance of 69.11 feet to the *POINT OF TERMINATION* on the South edge of a facilities site in the Northeast quarter of the Northwest quarter of said Section 18, from which a 1-1/2 inch iron pipe found for the Northwest corner of said Section 7 bears, N 16°04'46" W a distance of 5,834.40 feet.

The length of the above easement is 1,122.81 feet (68.05 rods) and contains a total of 0.77 acres of land.

The total length of the easement is 1,504.44 feet (91.18 rods), and contains 1.04 acres of land.

The edges of the easement are parallel with the centerline of the easement until reaching the boundaries of the subject tract of land.

All bearings and coordinates refer to NAD 83, New Mexico State Plane Coordinate System, East Zone, U.S. Survey Feet. (All bearings and distances are grid measurements.)

Title information furnished by B.C. Operating, Inc.

Reference accompanying Certificate of Survey prepared in conjunction with this legal description for easement.

STATE OF NEW MEXICO  
COUNTY OF LEA

I, Lloyd P. Short, New Mexico Professional Surveyor No. 21653, do hereby certify that this easement survey plat and the actual survey on the ground upon which it is based were performed by me or under my direct supervision; that I am responsible for this survey; that this survey meets the minimum standards for surveying in New Mexico; and that it is true and correct to the best of my knowledge and belief. I further certify that this survey is not a land division or subdivision as defined in the New Mexico Subdivision Act and that this instrument is an easement survey plat crossing an existing tract or tracts.



LLOYD P. SHORT, PS No. 21653 DATE: SEPTEMBER 09, 2015

R-SQUARED GLOBAL, LLC  
PROJECT NO. R3408\_001

A handwritten signature in blue ink that reads "Lloyd P. Short".

Modification in any way of the foregoing description terminates liability of Surveyor.