

30-015-38466

ONSHORE ORDER NO. 1
Chesapeake Operating, Inc.
Crow Flats 14 Federal 4H
SL: 1980' FSL & 200' FWL
BL: 1980' FSL & 330' FEL
Section 14-16S-28E
Eddy County, NM

CONFIDENTIAL – TIGHT HOLE
REVISED SURFACE USE PLAN

Lease No. NMNM 095630

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ONSHORE OIL & GAS ORDER NO. 1
Approval of Operations on Onshore
Federal and Indian Oil and Gas Leases

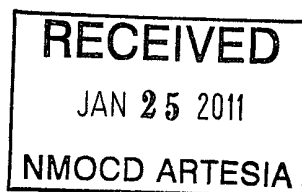
1. EXISTING ROADS/LEASE ROADS

- a. The proposed lease road 7471' in length and 16' in travel way width with a maximum disturbance area of 30' will be used, and in accordance with guidelines set forth in the BLM Onshore Orders. No turnouts are expected.
- b. Existing county and lease roads will be used to enter proposed access road.
- c. Location, access, and vicinity plats attached hereto. See Exhibits A-1 to A-5.

LOCATION

- a. In order to level the location, cut and fill will be required. Please see attached Well Location and Acreage Dedication Plat – Exhibits A-1 to A-4.
- b. Any fences cut will be repaired. Cattle guards will be installed, if needed.
- c. 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.
- d. Driving directions are from the Intersection of US Hwy 82 and Co. road 214 (Barnaval Draw Rd), go North on county Rd 214 approx. 6.9 miles. Veer left and go Northwest approx. 2.5 miles. Veer left and go West approx. 0.2 miles. Veer left and go approx. 0.6 miles. Veer left and go South approx. 1.2 miles. Turn right and go West-Northwest approx. 1.0 miles to the Crow Flats 14 Federal 34 well pad and proposed road survey. Follow road survey North approx. 0.45 miles then West approx. 0.7 miles, then Southwest approx. 0.3 miles to this location.

2. LOCATION OF EXISTING WELLS WITHIN A 1-MILE RADIUS OF THE PROPOSED LOCATION – see Exhibit B.



3. LOCATION OF PRODUCTION FACILITIES

It is anticipated that production facilities will be located on the well pad and oil to be sold at the wellhead and/or tank battery. This well will be connected to DCP's existing system, tie-in point will be less than 1 mile from well. – See Exhibit C

4. LOCATION AND TYPE OF WATER SUPPLY

Water will be obtained from a private water source. Chesapeake Operating, Inc. will ensure all proper notifications and filings are made with the state.

5. CONSTRUCTION MATERIALS

No construction materials will be used from Section 14-16S-28E. All material (i.e. shale) will be acquired from private or commercial sources.

6. METHODS FOR HANDLING WASTE DISPOSAL

A closed system will be utilized consisting of above ground steel tanks. All wastes accumulated during drilling operations will be contained in a portable trash cage and removed from location and deposited in an approved sanitary landfill.

7. ANCILLARY FACILITIES

None

8. WELLSITE LAYOUT

The proposed site layout plat is attached showing the Cactus Rig #120 orientation and equipment location. See Exhibit D.

9. PLANS FOR RECLAMATION OF THE SURFACE

The location will be restored to as near as original condition as possible. Reclamation of the surface shall be done in strict compliance with the existing New Mexico Oil Conservation Division regulations and BLM.

Backfilling leveling, and contouring are planned as soon as the drilling rig and steel tanks are removed. Wastes and spoils materials will be disposed immediately after drilling is completed. If production is obtained, the unused area will be restored as soon as possible. The rehabilitation will begin after the workover rig is removed.

Interim Reclamation: downsize the footprint of disturbance by reclaiming portions of the well pad not needed for production operations. The portions of the cleared well pad not needed for operational and safety purposes will be recontoured back to natural surroundings as much as possible. Caliche material will be used either to recontour or will be used to repair roads within

the lease. Topsoil material will be spread out over reclaimed area and the site will be seeded with an approved BLM grass mix. In order to inspect and operate the well or complete work over operations, it may be necessary to drive, park, and operate on restored, interim vegetation as long as the damage is repaired or reclaimed after work is complete. In most cases the well pad is pulled in to within 30 feet of the well anchors unless layout won't allow or a safety issues is in place.

Final Reclamation Procedure: Upon final abandonment of the well, caliche material from the well pad and access road will be removed and utilized to recontour to a final contour that blends with the surrounding topography as much as possible. Any caliche material not used will be utilized to repair roads within the lease. Topsoil will be distributed over the reclamation area and cross ripped to control erosion, the side will be seeded with an approved BLM mixture.

11. SURFACE & MINERAL OWNERSHIP

United States of America
Department of Interior
Bureau of Land Management

GRAZING LESSEE

Bogle LTD.
P.O. Box 460
Dexter, NM 88230

(Chesapeake Operating, Inc. has an agreement with the grazing lessee)

12. ADDITIONAL INFORMATION

A Class III cultural resource inventory report was prepared by Boone Archaeological Services, Carlsbad, New Mexico for the proposed location. A copy of the report has been sent to the BLM office under separate cover and is also attached for reference. See Exhibit E.

Chesapeake Operating, Inc. agrees to be responsible under the terms and conditions of the lease for the operations conducted upon the lease lands.

13. OPERATOR'S REPRESENTATIVES

ONSHORE ORDER NO. 1
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Drilling and Completion Operations

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Geoscience Manager

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District Land Coordinator

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Justin Zerkle
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Sr. Regulatory Compliance Specialist

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SL: 1980' FSL & 200' FWL
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Section 14-16S-28E
Eddy County, NM

CONFIDENTIAL – TIGHT HOLE
OPERATOR CERTIFICATION

Lease No. NMNM 095630

CERTIFICATION

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Executed this 31st day of August, 2010

Name: 

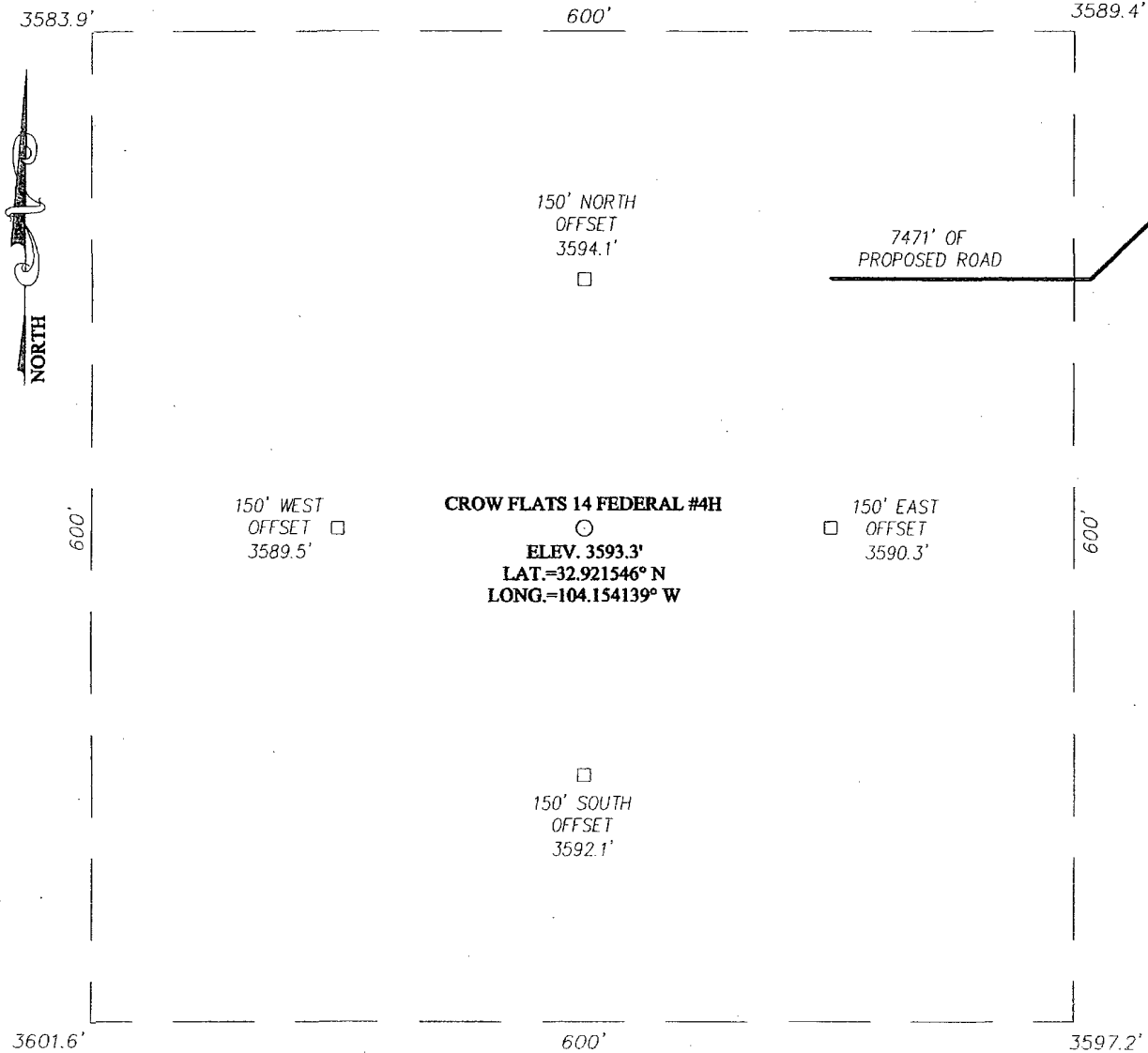
Bud Cravey, Sr. Field Representative

Address: 2010 Rankin Highway, Midland, TX 79701

Telephone: 432-238-7293

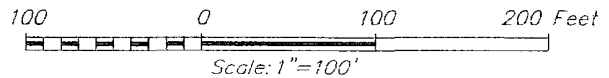
E-mail: bud.cravey@chk.com

SECTION 14, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M.
 EDDY COUNTY NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF U.S. HWY. #82 AND CO. RD. #214 (BARNAVAL DRAW ROAD), GO NORTH ON CO. RD. #214 APPROX. 6.9 MILES. VEER LEFT AND GO NORTHEAST APPROX. 2.5 MILES. VEER LEFT AND GO WEST APPROX. 0.2 MILES. VEER LEFT AND GO APPROX. 0.6 MILES. VEER LEFT AND GO SOUTH APPROX. 1.2 MILES. TURN RIGHT AND GO WEST-NORTHWEST APPROX. 1.0 MILE TO THE CROW FLATS 14 FEDERAL #34 WELL PAD AND PROPOSED ROAD SURVEY. FOLLOW ROAD SURVEY NORTH APPROX. 0.45 MILES, THEN WEST APPROX. 0.7 MILES, THEN SOUTHWEST APPROX. 0.3 MILES TO THIS LOCATION.



PROVIDING SURVEYING SERVICES
 SINCE 1946

JOHN WEST SURVEYING COMPANY

412 N. DAL PASO
 HOBBS, N.M. 88240
 (575) 393-3117

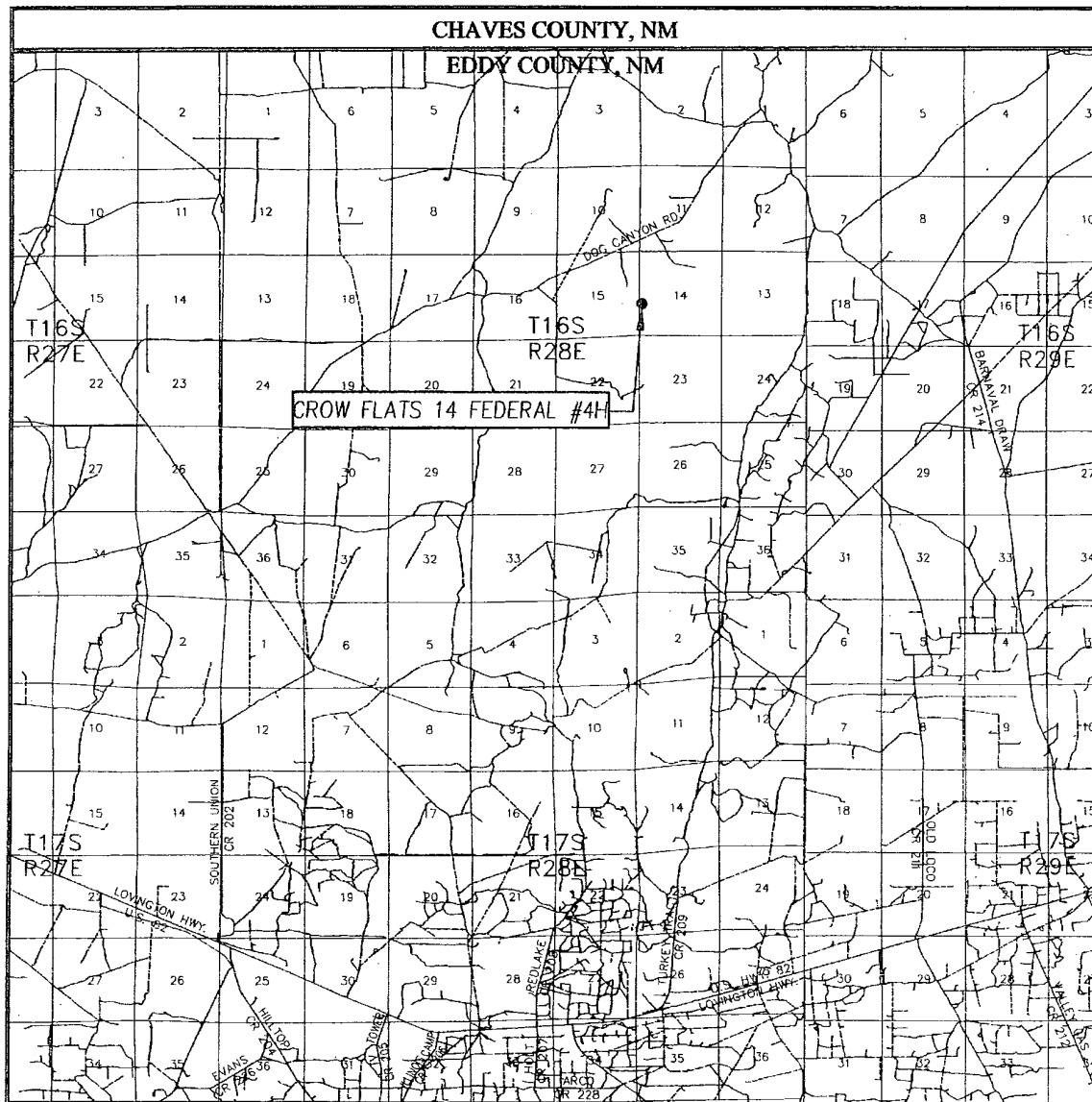
CHESAPEAKE OPERATING, INC.

CROW FLATS 14 FEDERAL #4H WELL
 LOCATED 1980 FEET FROM THE SOUTH LINE
 AND 200 FEET FROM THE WEST LINE OF SECTION 14,
 TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M.,
 EDDY COUNTY, NEW MEXICO

Survey Date: 4/8/10	Sheet 1 of 1 Sheets
W.O. Number: 10.11.0485	Dr. By: LA
Date: 4/20/10	Rev 1:
10110485	Scale: 1"=100'

EXHIBIT A-2

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 14 TWP. 16-S RGE. 28-E

SURVEY N.M.P.M.

COUNTY EDDY STATE NEW MEXICO

DESCRIPTION 1980' FSL & 200' FWL

ELEVATION 3593'

OPERATOR CHESAPEAKE OPERATING, INC.

LEASE CROW FLATS 14 FEDERAL

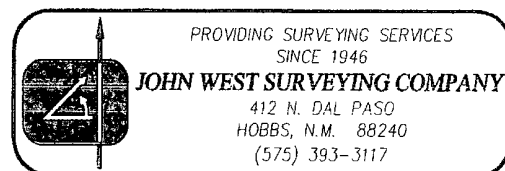
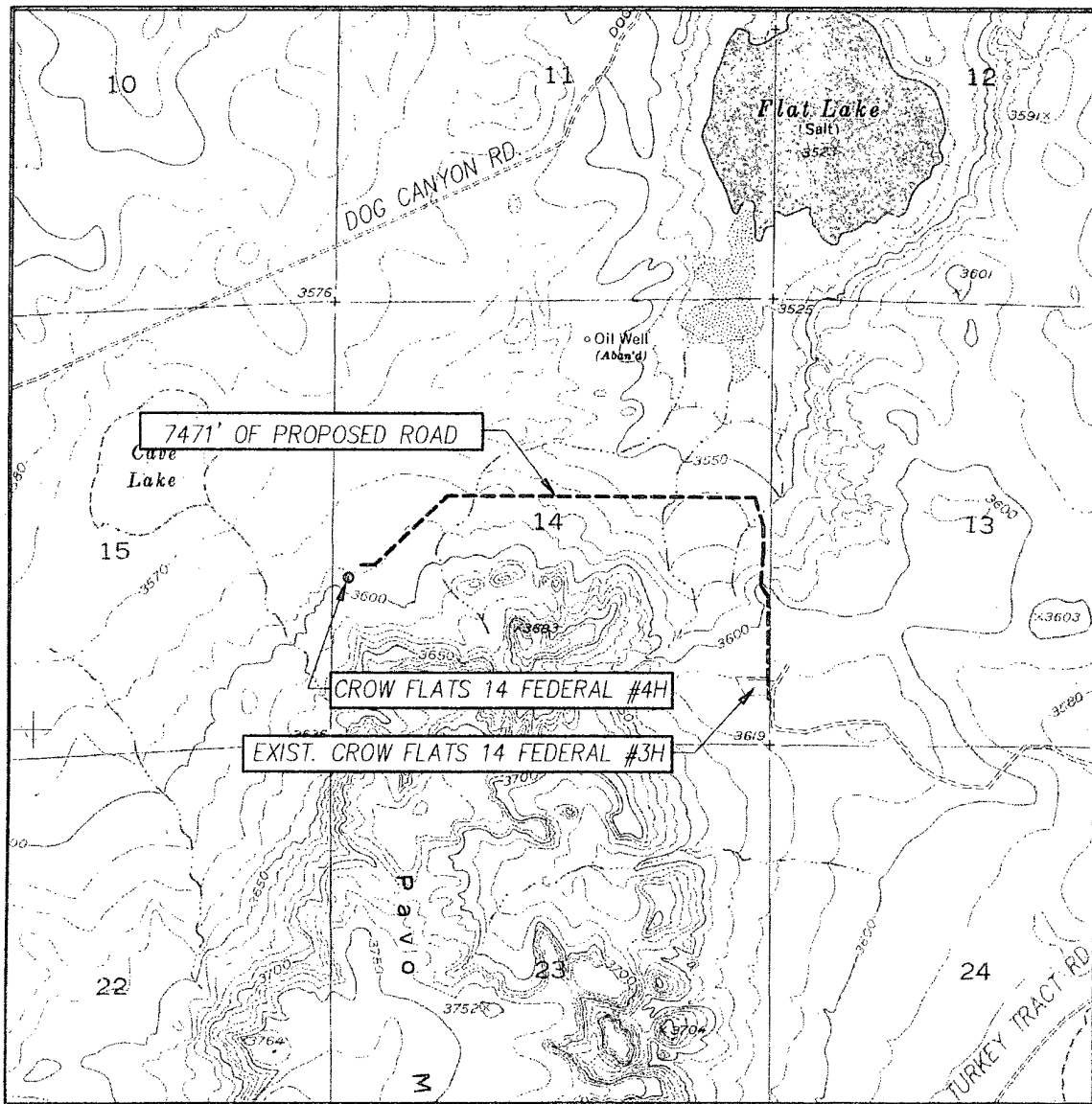


EXHIBIT A-3

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
DIAMOND MOUND, N.M. — 10'

SEC. 14 TWP. 16-S. RGE. 28-E

SURVEY N.M.P.M.

COUNTY EDDY STATE NEW MEXICO

DESCRIPTION 1980' FSL & 200' FWL

ELEVATION 3593'

OPERATOR CHESPEAKE OPERATING, INC.

LEASE CROW FLATS 14 FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
DIAMOND MOUND, N.M.

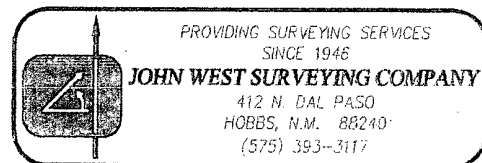
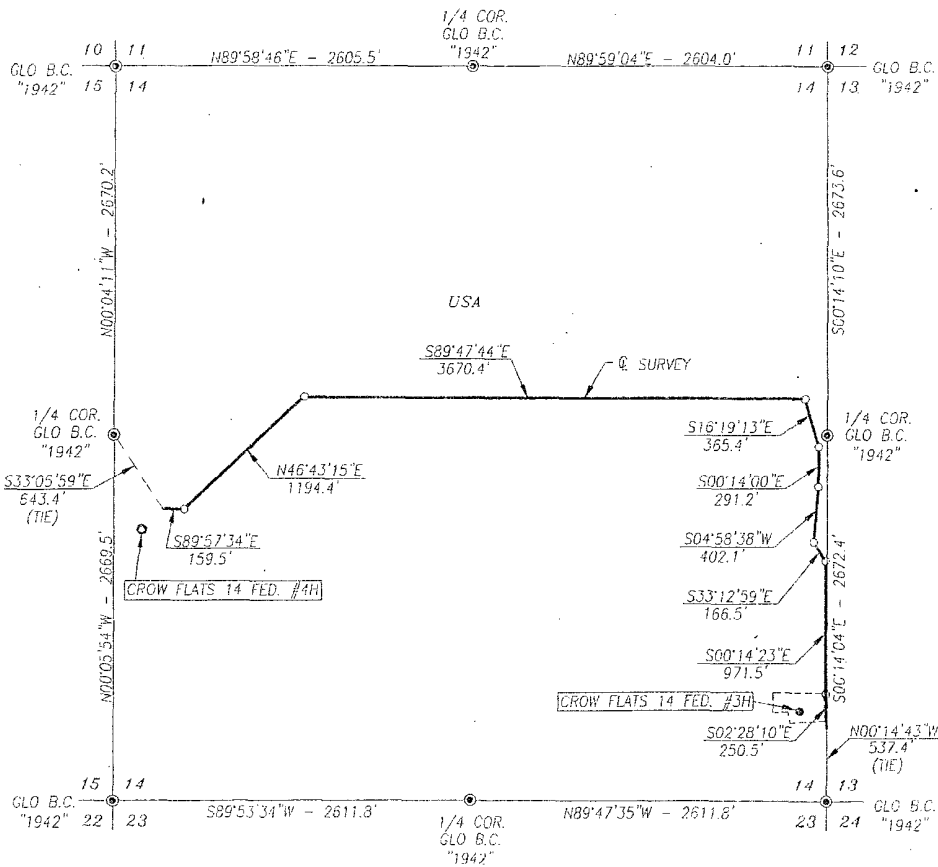


EXHIBIT A-4

SECTION 14, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M.,
EDDY COUNTY,
NEW MEXICO.



DESCRIPTION

A STRIP OF LAND 50.0 FEET WIDE AND 7471.5 FEET OR 1.415 MILES IN LENGTH CROSSING USA LAND IN SECTION 14, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO AND BEING 25.0 FEET LEFT AND 25.0 FEET RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY.

NOTE: BEARINGS SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATE SYSTEM "NEW MEXICO EAST ZONE" NORTH AMERICAN DATUM 1983. DISTANCES ARE SURFACE VALUES.

I HEREBY CERTIFY THAT I AM THE REGISTERED SURVEYOR AND AM RESPONSIBLE FOR THIS SURVEY. THAT THE SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

REGISTERED SURVEYOR
3239

Ronald J. Boson
RONALD J. BOSON N.M. P.S. No. 3239

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(575) 393-3117

1000 0 1000 2000 FEET
Scale: 1"=1000'

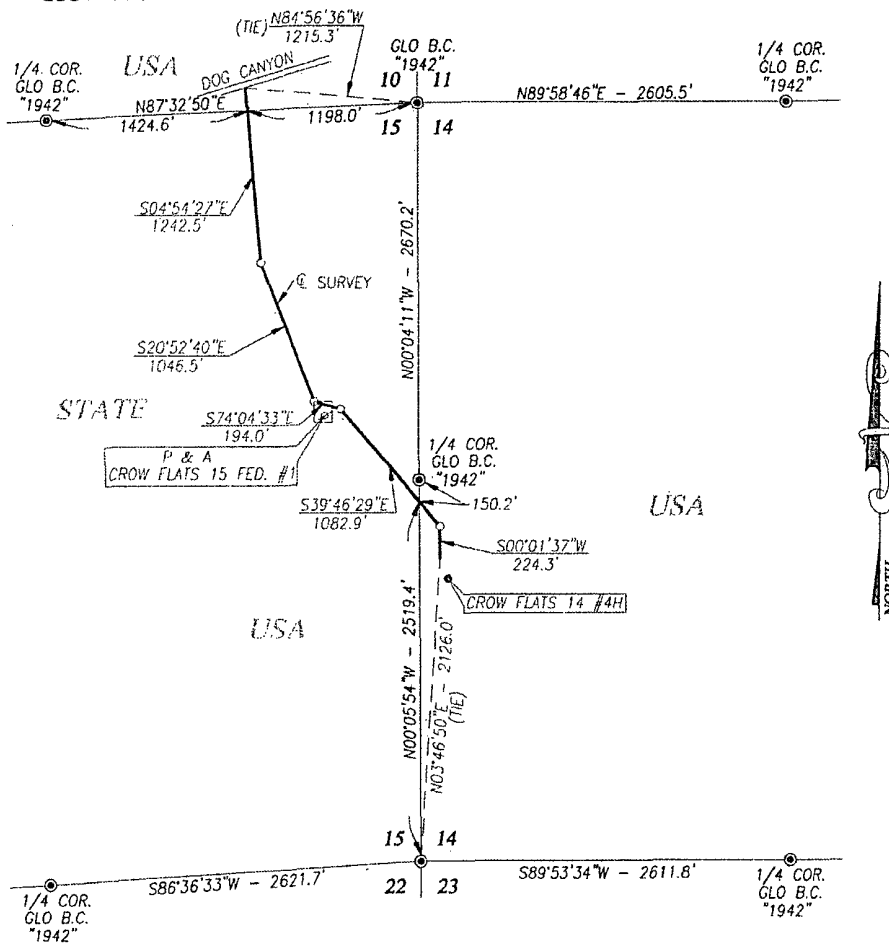
CHESAPEAKE OPERATING, INC.

SURVEY OF A PROPOSED ROAD CROSSING
SECTION 14, TOWNSHIP 16 SOUTH, RANGE 28 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO

Survey Date: 4/12/10	Sheet 1 of 1 Sheets
W.O. Number: 10110485	Drawn By: LA
Date: 4/26/10	10110485

EXHIBIT A-5

SECTIONS 10, 14 & 15, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M.
EDDY COUNTY NEW MEXICO



DESCRIPTION

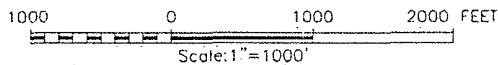
A STRIP OF LAND 50.0 FEET WIDE AND 3790.2 FEET OR 0.718 MILES IN LENGTH CROSSING USA LAND IN SECTIONS 10, 14 & 15, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO AND BEING 25.0 FEET LEFT AND 25.0 FEET RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY.

NOTE

BEARINGS SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATE SYSTEM "NEW MEXICO EAST ZONE" NORTH AMERICAN DATUM 1983. DISTANCES ARE SURFACE VALUES.

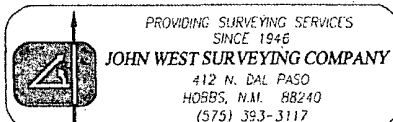
LEGEND

● DENOTES FOUND CORNER AS NOTED



I HEREBY CERTIFY THAT I AM RESPONSIBLE FOR THIS ACTUAL ON THE GROUND SURVEY THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

Ronald J. Eidson 06/16/2010
GARV G. EIDSON, N.M. P.S. No. 12641
RONALD J. EIDSON, N.M. P.S. No. 3239



CHESAPEAKE OPERATING, INC.

CENTERLINE SURVEY OF AN ACCESS ROAD
CROSSING SECTIONS 10, 14 & 15,
TOWNSHIP 16 SOUTH, RANGE 28 EAST,
N.M.P.M. EDDY COUNTY, NEW MEXICO

Survey Date: 6/8/10	Sheet 1 of 1 Sheets
W.O. Number: 10.11.0826	Drawn By: LA
Date: 6/16/10	CAD File: 10110826

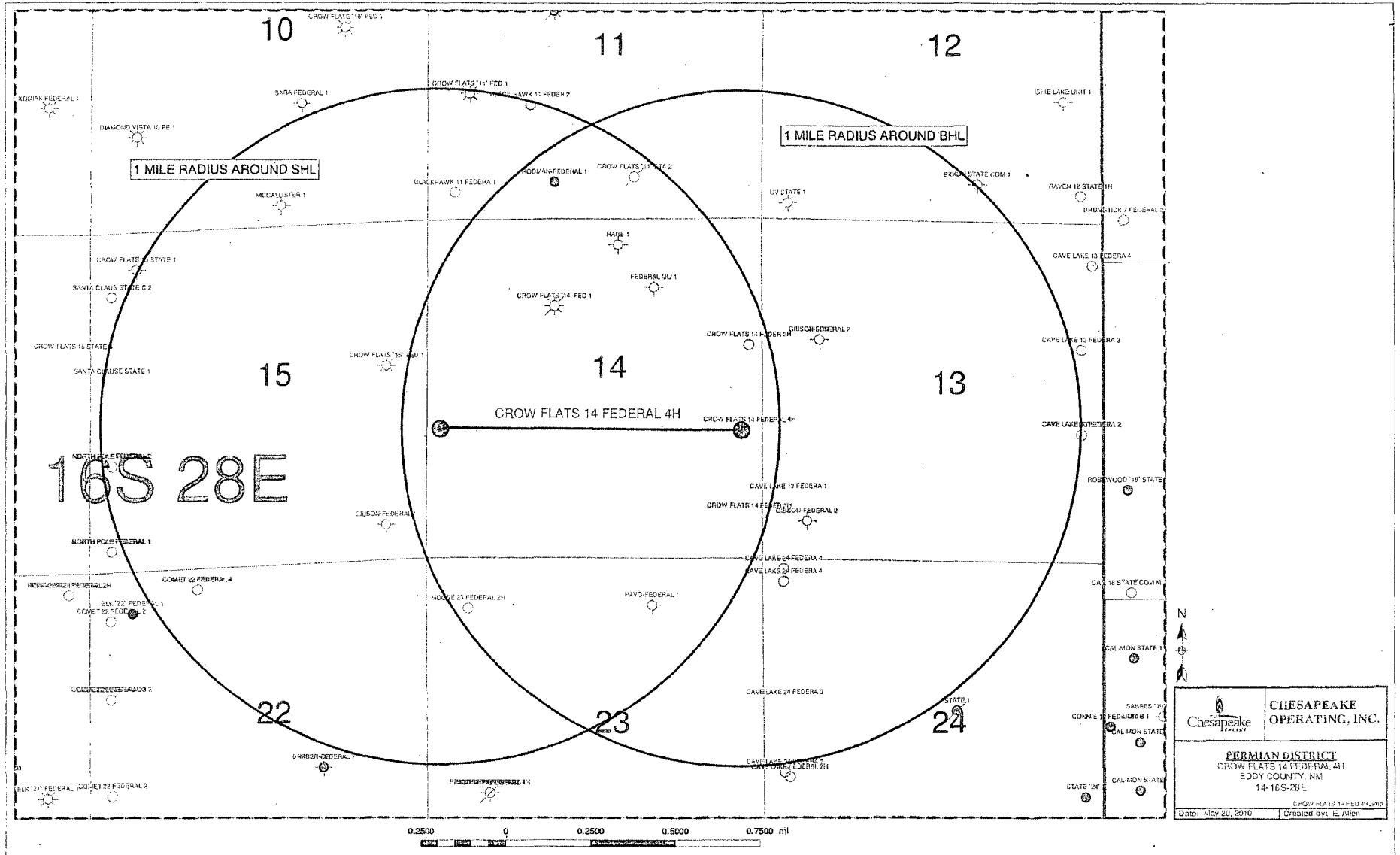


EXHIBIT B

Western Drilling Rig # 6

CLOSED Loop SET UP

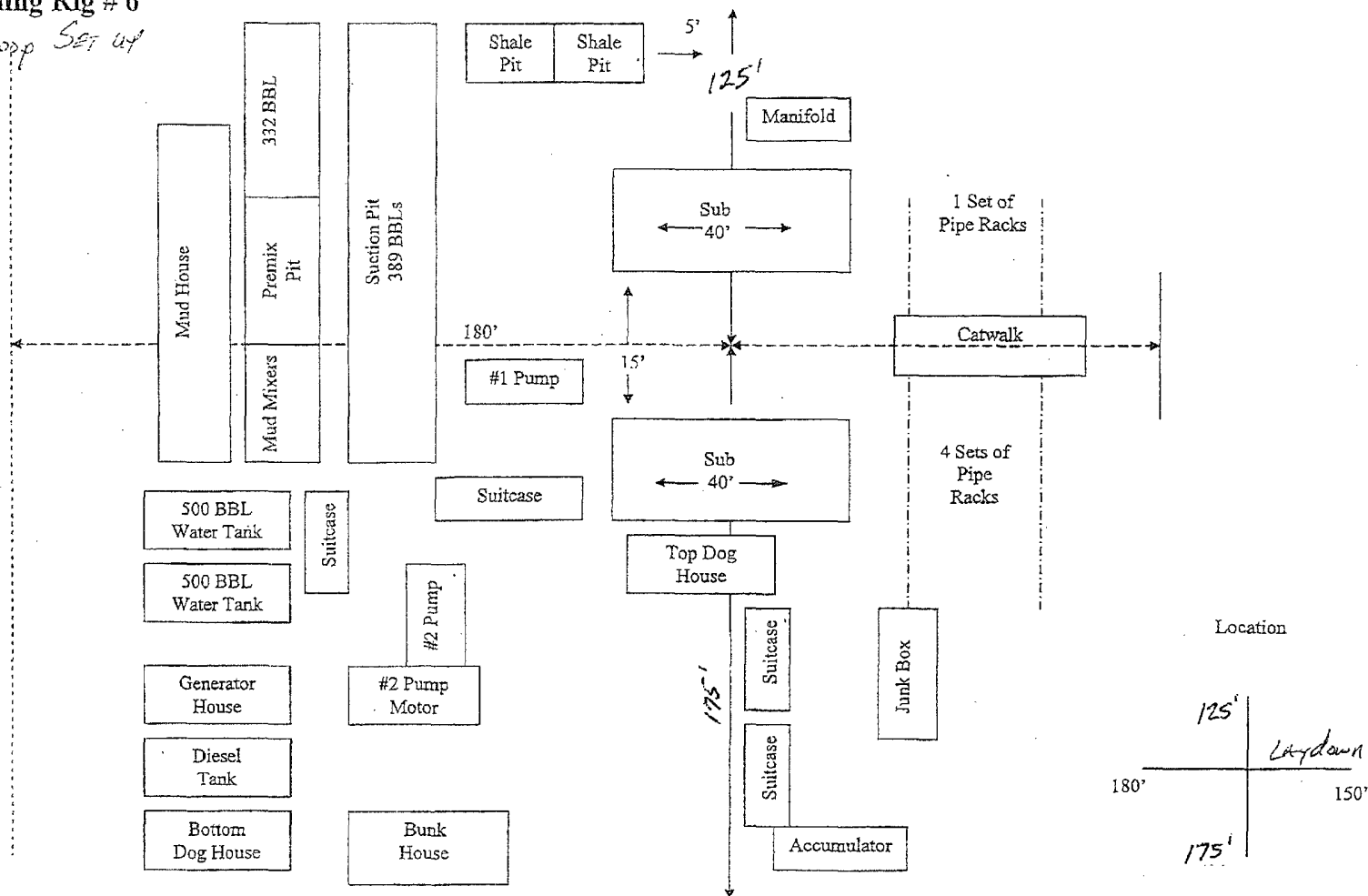
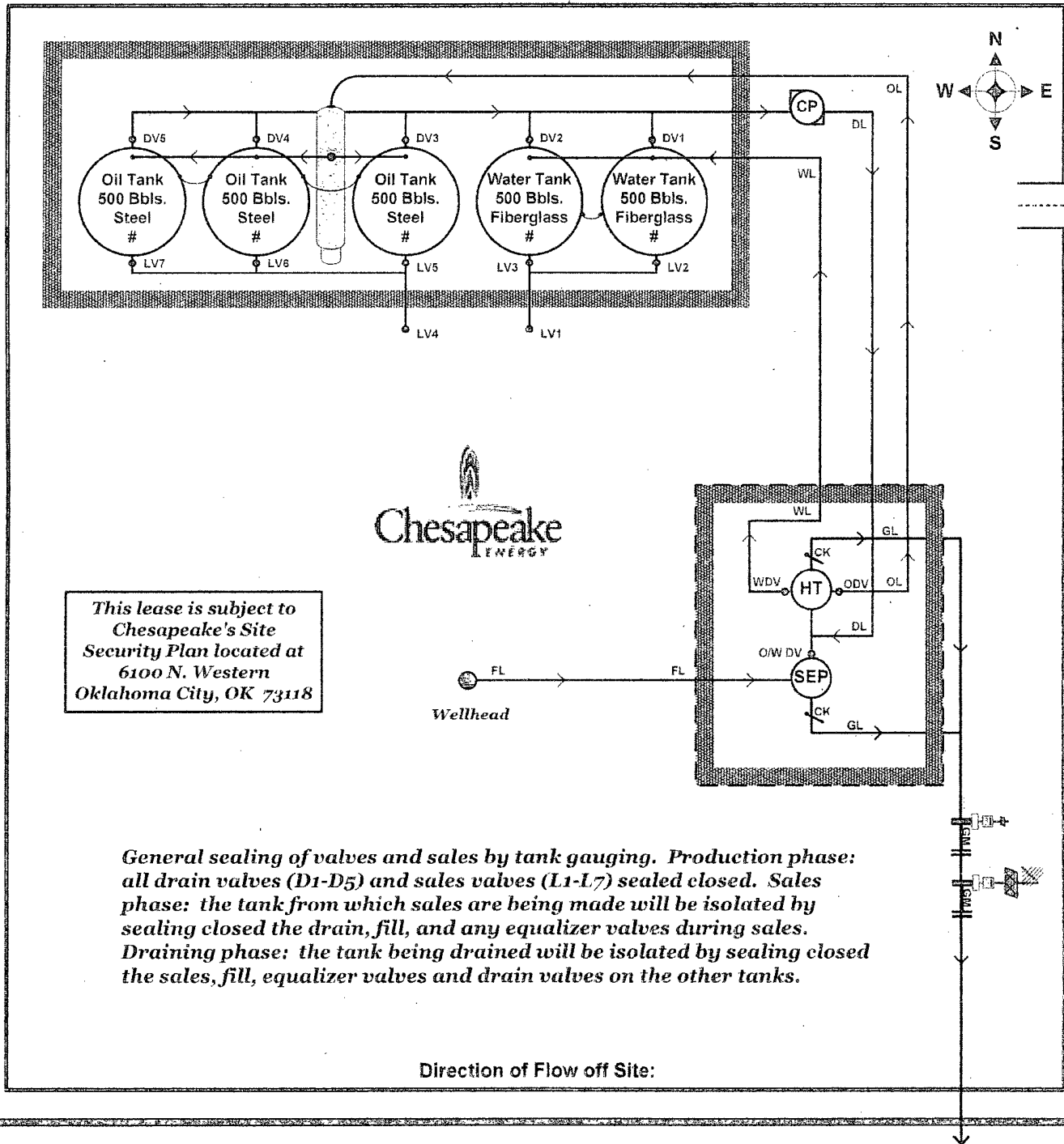


EXHIBIT D

CHESAPEAKE OPERATING, INC.

Crow Flats 14 Federal #4H
Section 14-Township 16S – Range – 28E
1980 FSL & 200' FWL
Eddy Co., New Mexico



Prepared by: Jackie Reynolds
Date: 8-26-2010

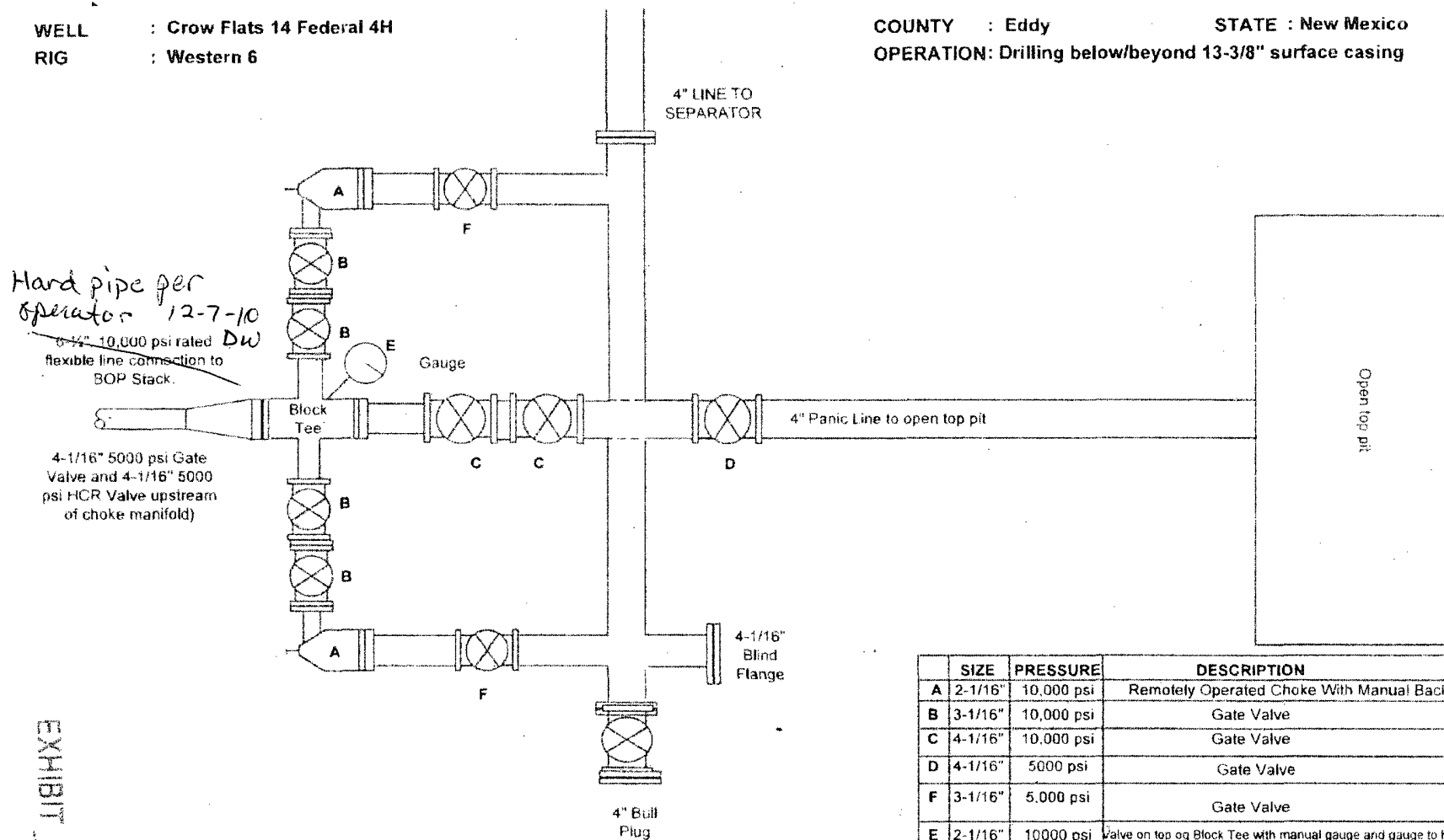
Approved by:
Date:

EXHIBIT C

SCHEMATIC OF CHOKE MANIFOLD SHOWING CLOSED LOOP SYSTEM

WELL : Crow Flats 14 Federal 4H
RIG : Western 6

COUNTY : Eddy STATE : New Mexico
OPERATION: Drilling below/beyond 13-3/8" surface casing



	SIZE	PRESSURE	DESCRIPTION
A	2-1/16"	10,000 psi	Remotely Operated Choke With Manual Backup
B	3-1/16"	10,000 psi	Gate Valve
C	4-1/16"	10,000 psi	Gate Valve
D	4-1/16"	5000 psi	Gate Valve
F	3-1/16"	5,000 psi	Gate Valve
E	2-1/16"	10000 psi	Valve on top of Block Tee with manual gauge and gauge to hydraulic choke

EXHIBIT E-2