I-06-12
6/6/06

Form 3160-3
(April 2004)

CONFIDENTIAL

OCD-HOBBS

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No. **NMLC030133B**

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.

1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

8. Lease Name and Well No. 35841
Millard Deck Estate 28 Federal 1

2. Name of Operator 147179
CHESAPEAKE OPERATING, INC. ATTN: **LINDA GOOD**

9. API Well No.
30-025-38103

3a. Address **P.O. BOX 18496, OKLAHOMA CITY, OK 73154-0496**

3b. Phone No. *(include area code)* **405-767-4275**

10. Field and Pool, or Exploratory
LANGLEY Strawn

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface **965 FNL 1590 FEL, NWNE**
At proposed prod. zone **810 FNL 1480 FEL, NWNE** Unit B

11. Sec., T. R. M. or Blk. and Survey or Area
28-22S-36E

14. Distance in miles and direction from nearest town or post office*
APPROX. 10 MILES SW OF EUNICE, NM.

12. County or Parish **LEA**

13. State **NM**

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of acres in lease	17. Spacing Unit dedicated to this well
	920	**40**
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. on file
	10,000	**#NM2634**
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
3503' GR 3515' KB ESTIMATED		

24. Attachments

Capitan Controlled Water Basin

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature	Name *(Printed/Typed)*	Date
	HENRY HOOD	

Title
SR. VICE PRESIDENT-LAND & LEGAL & GENERAL COUNSEL

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
/s/ Tony J. Herrell	**/s/ Tony J. Herrell**	JUN 30 2006
Title **FIELD MANAGER**	Office **CARLSBAD FIELD OFFICE**	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

APPROVAL FOR 1 YEAR

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

NSL-5383 (BHL)

Witness Surface Casing

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease – 4 Copies
Fee Lease – 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
30-025- 38103	37090	Langley; Strawn, (Oil)

Property Code	Property Name	Well Number
35841	MILLARD DECK ESTATE 28 FEDERAL	1

OGRID No.	Operator Name	Elevation
147179	CHESAPEAKE OPERATING, INC.	3505'

Surface Location

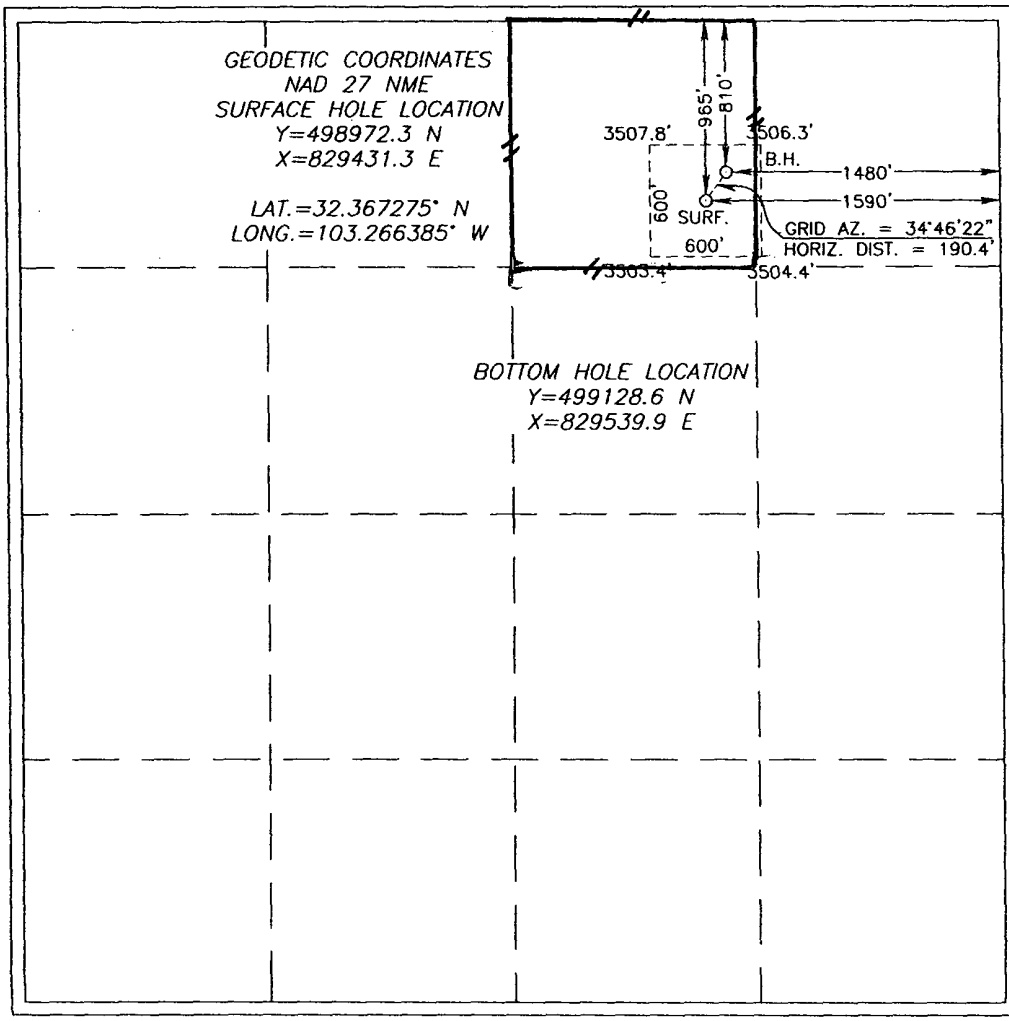
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	28	22-S	36-E		965	NORTH	1590	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	28	22-S	36-E		810	NORTH	1480	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			NSL-5383 (BHL)

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION

I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Kathy F. Blick 6-1-06
Signature Date

Kathy F. Blick
Printed Name

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

APRIL 26, 2006
Date Surveyed LA REV: 5/24/06

Signature & Seal of Professional Surveyor

GARY L. EDSON NEW MEXICO PROFESSIONAL SURVEYOR

5/24/06

06.11.0729

Certificate No. GARY EDSON 12641

Revised EXHIBIT A-1

Chesapeake Operating Inc.
Millard Deck Estate 28 Federal 1
965 FNL 1590 FEL
NWNE of Section 28-22S-36E
Lea County, NM

Confidential – Tight Hole
Lease No. NMLC 30133B

#24 Attachment to Application for Permit to Drill or Re-enter

Chesapeake Operating, Inc. respectfully requests permission to drill a well to 10,000' to test the Strawn formation. If productive, casing will be run and the well completed. If dry, the well will be plugged and abandoned as per BLM and New Mexico Oil Conservation Division requirements.

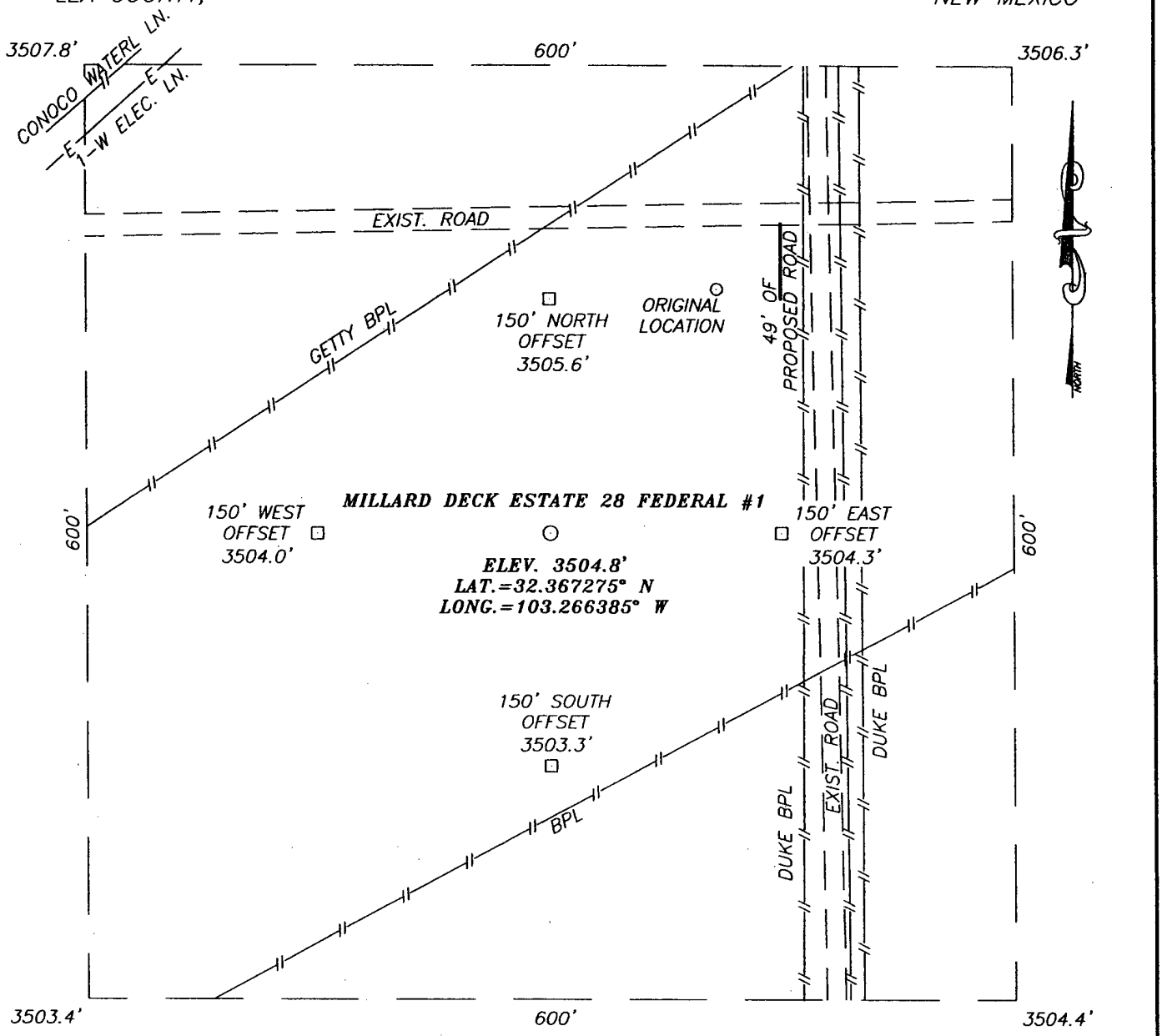
Please find the Surface Use Plan and Drilling Plan as required by Onshore Order No. 1. A general rig plat is attached as Exhibit D. A final rig plat will be submitted prior to spud. Exhibit E Archeological Survey to follow.

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

Please be advised that Chesapeake Operating, Inc. is considered to be the Operator of the above mentioned well. Chesapeake Operating, Inc. agrees to be responsible under the terms and conditions of the lease for the operations conducted upon the lease lands.

SECTION 28, TOWNSHIP 22 SOUTH, RANGE 36 EAST, N.M.P.M.,

LEA COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF CO. RD. E-21 (DELAWARE BASIN) AND CO. RD. E-21 (WEAVER RD) GO EAST ON DELAWARE BASIN ROAD APPROX. 2.0 MILES. TURN RIGHT AND GO SOUTH APPROX. 2.4 MILES. TURN RIGHT AND GO WEST APPROX. 0.4 MILES. TURN RIGHT AND GO NORTH APPROX. 0.2 MILES. THIS LOCATION IS APPROX. 180 FEET WEST.

100 0 100 200 Feet

Scale: 1"=100'

PROVIDING SURVEYING SERVICES SINCE 1946

JOHN WEST SURVEYING COMPANY

412 N. DAL PASO

HOBBS, N.M. 88240

(505) 393-3117

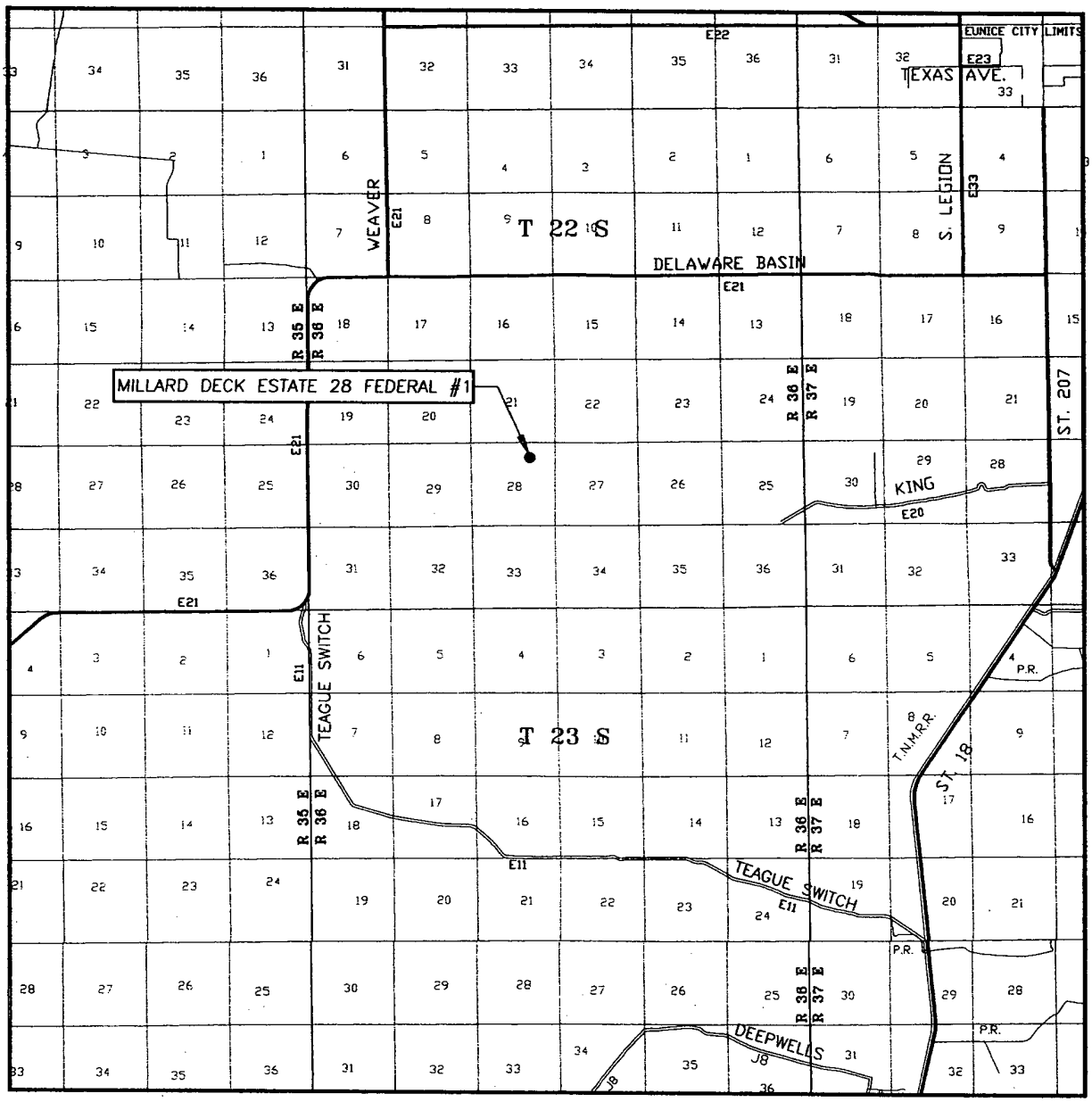
CHESAPEAKE OPERATING, INC.

MILLARD DECK ESTATE 28 FEDERAL #1 WELL LOCATED 965 FEET FROM THE NORTH LINE AND 1590 FEET FROM THE EAST LINE OF SECTION 28, TOWNSHIP 22 SOUTH, RANGE 36 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO.

Survey Date: 4/26/06	Sheet 1 of 1 Sheets		
W.O. Number: 06.11.0729	Dr By: LA		Rev 1:N/A
Date: 5/1/06	Disk: CD#5	06110729	Scale: 1"=100'

EXHIBIT A-2

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 28 TWP. 22-S RGE. 36-E

SURVEY N.M.P.M.

COUNTY LEA STATE NEW MEXICO

DESCRIPTION 965' FNL & 1590' FEL

ELEVATION 3505'

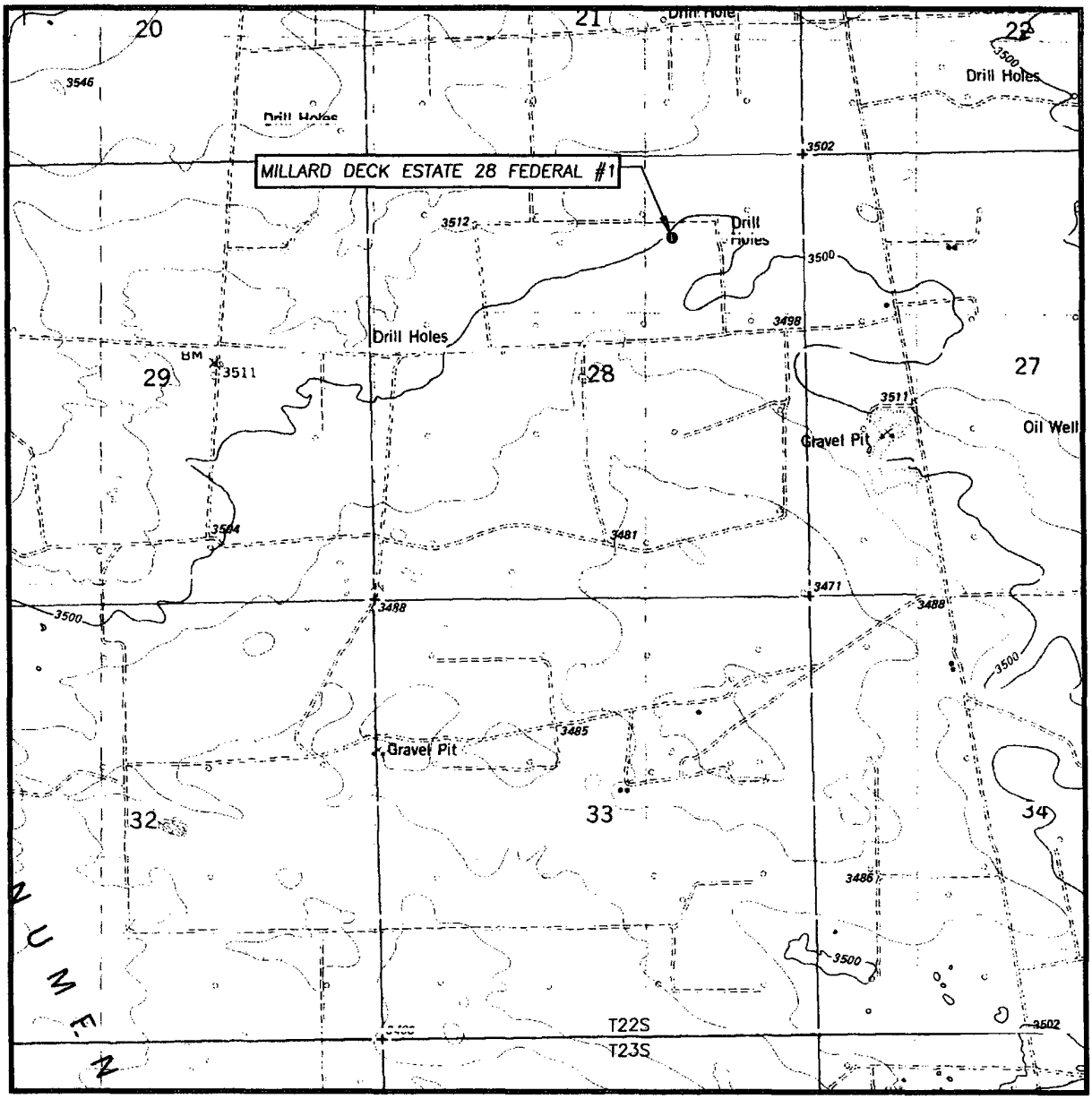
OPERATOR CHESAPEAKE OPERATING, INC.

LEASE MILLARD DECK ESTATE 28 FED.

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

EXHIBIT A-3

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
EAST LAKE, N.M. – 10'

SEC. 28 TWP. 22-S RGE. 36-E

SURVEY N.M.P.M.

COUNTY LEA STATE NEW MEXICO

DESCRIPTION 965' FNL & 1590' FEL

ELEVATION 3505'

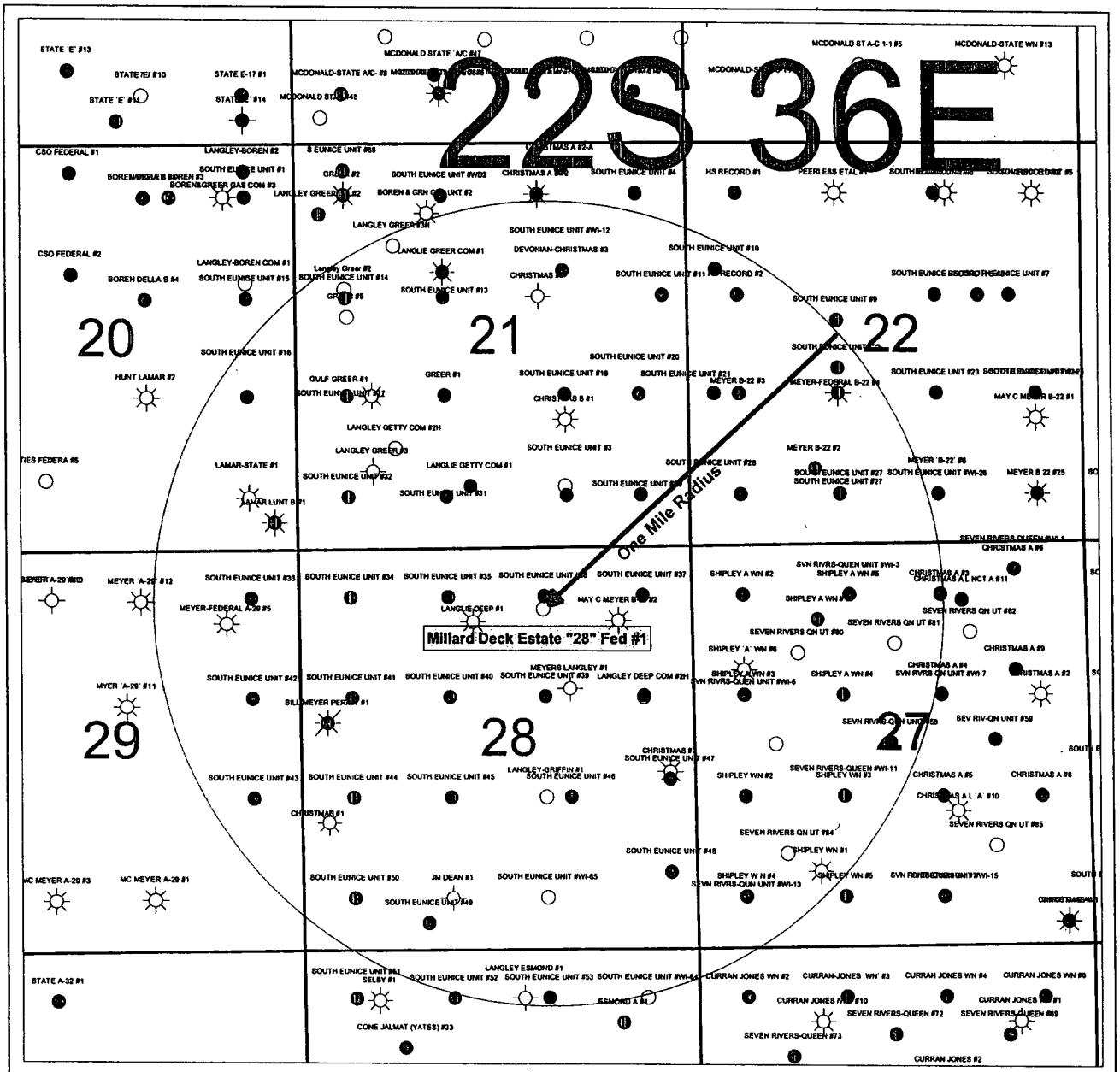
OPERATOR CHESAPEAKE OPERATING, INC.

LEASE MILLARD DECK ESTATE 28 FED.

U.S.G.S. TOPOGRAPHIC MAP
EAST LAKE, N.M.

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

EXHIBIT A-4

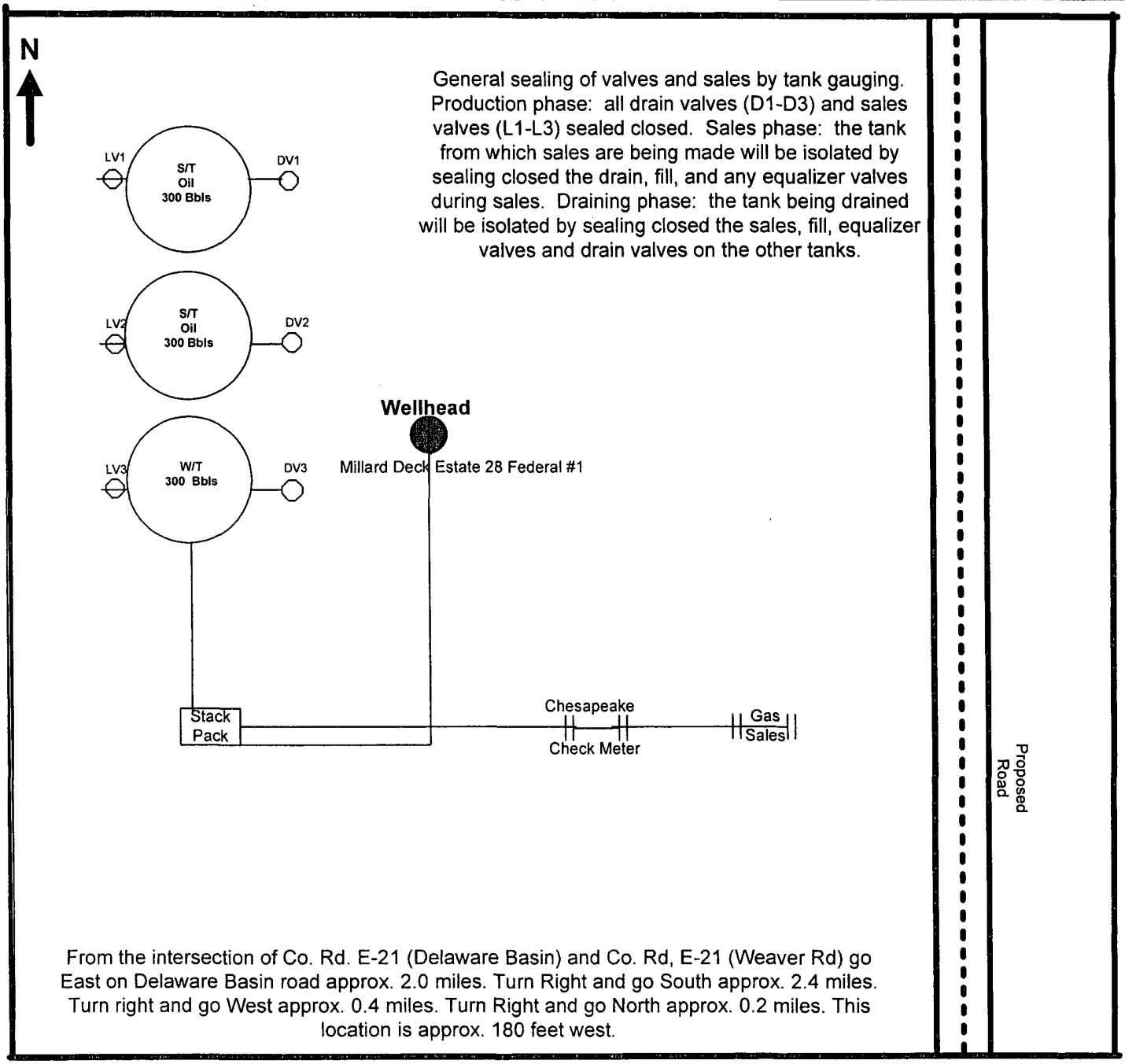


Chesapeake	CHESAPEAKE OPERATING, INC.
Millard Deck Estate 28 Fed #1 ONE MILE RADIUS	
RLM Millard Deck Estate 28 Fed 1 – a mile radius.grnp	
Date: 30 May, 2006	Geologist: RLM

EXHIBIT B

CHESAPEAKE OPERATING, INC.

MILLARD DECK ESTATE 28 FEDERAL 1
28-22S-36E
LEA COUNTY, NEW MEXICO



General sealing of valves and sales by tank gauging. Production phase: all drain valves (D1-D3) and sales valves (L1-L3) sealed closed. Sales phase: the tank from which sales are being made will be isolated by sealing closed the drain, fill, and any equalizer valves during sales. Draining phase: the tank being drained will be isolated by sealing closed the sales, fill, equalizer valves and drain valves on the other tanks.

From the intersection of Co. Rd. E-21 (Delaware Basin) and Co. Rd, E-21 (Weaver Rd) go East on Delaware Basin road approx. 2.0 miles. Turn Right and go South approx. 2.4 miles. Turn right and go West approx. 0.4 miles. Turn Right and go North approx. 0.2 miles. This location is approx. 180 feet west.

MILLARD DECK ESTATE 28 FEDERAL #1

Direction of Flow off Site:

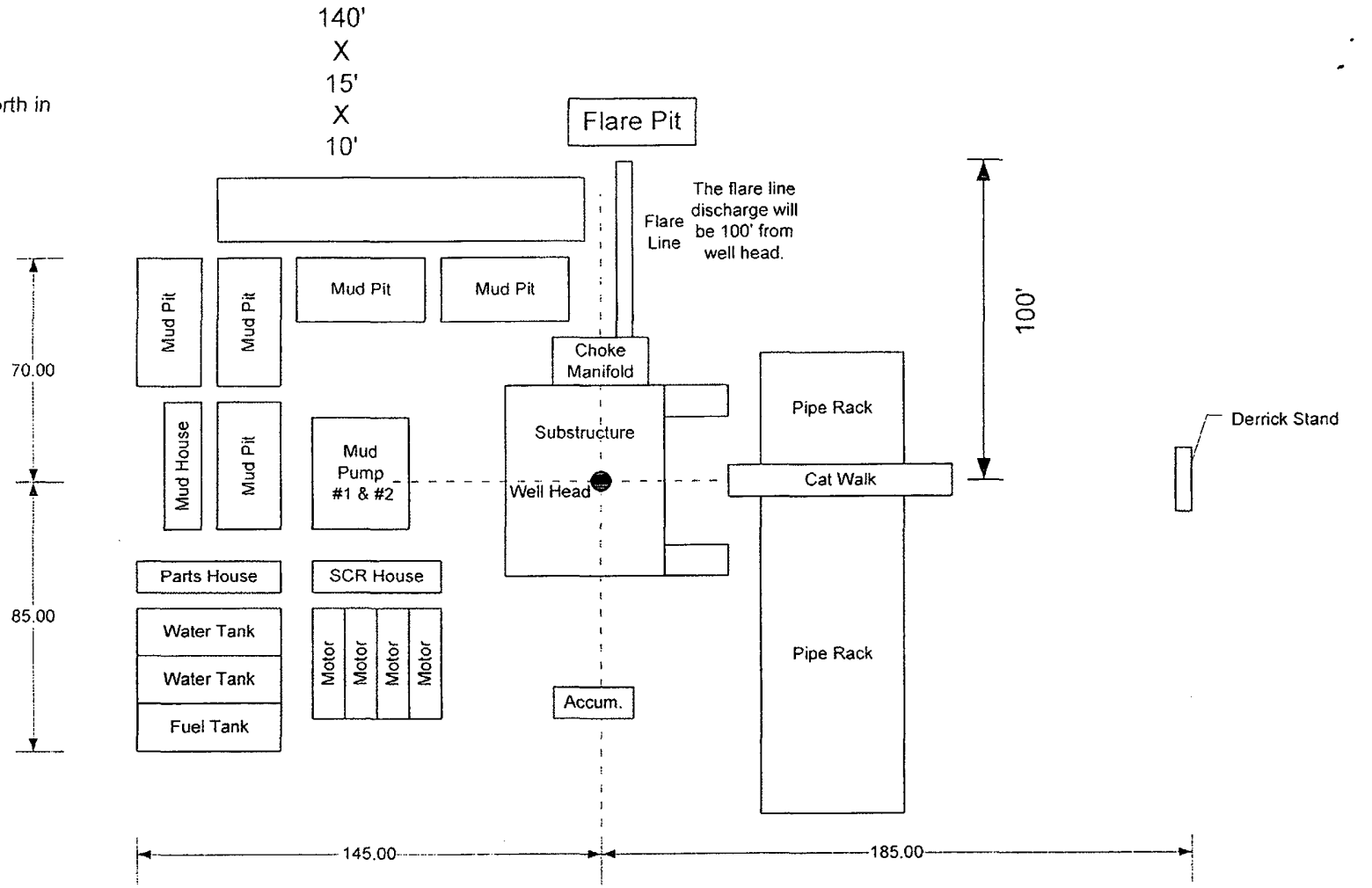
This lease is subject to Chesapeake's Site Security Plan located at 6100 N. Western Oklahoma City, OK 73118

Prepared by: DEBBIE HERNANDEZ
Date: 05-22-2006

Approved by:
Date:

EXHIBIT C

Prevailing Winds from the North in Winter and from the South in Summer.

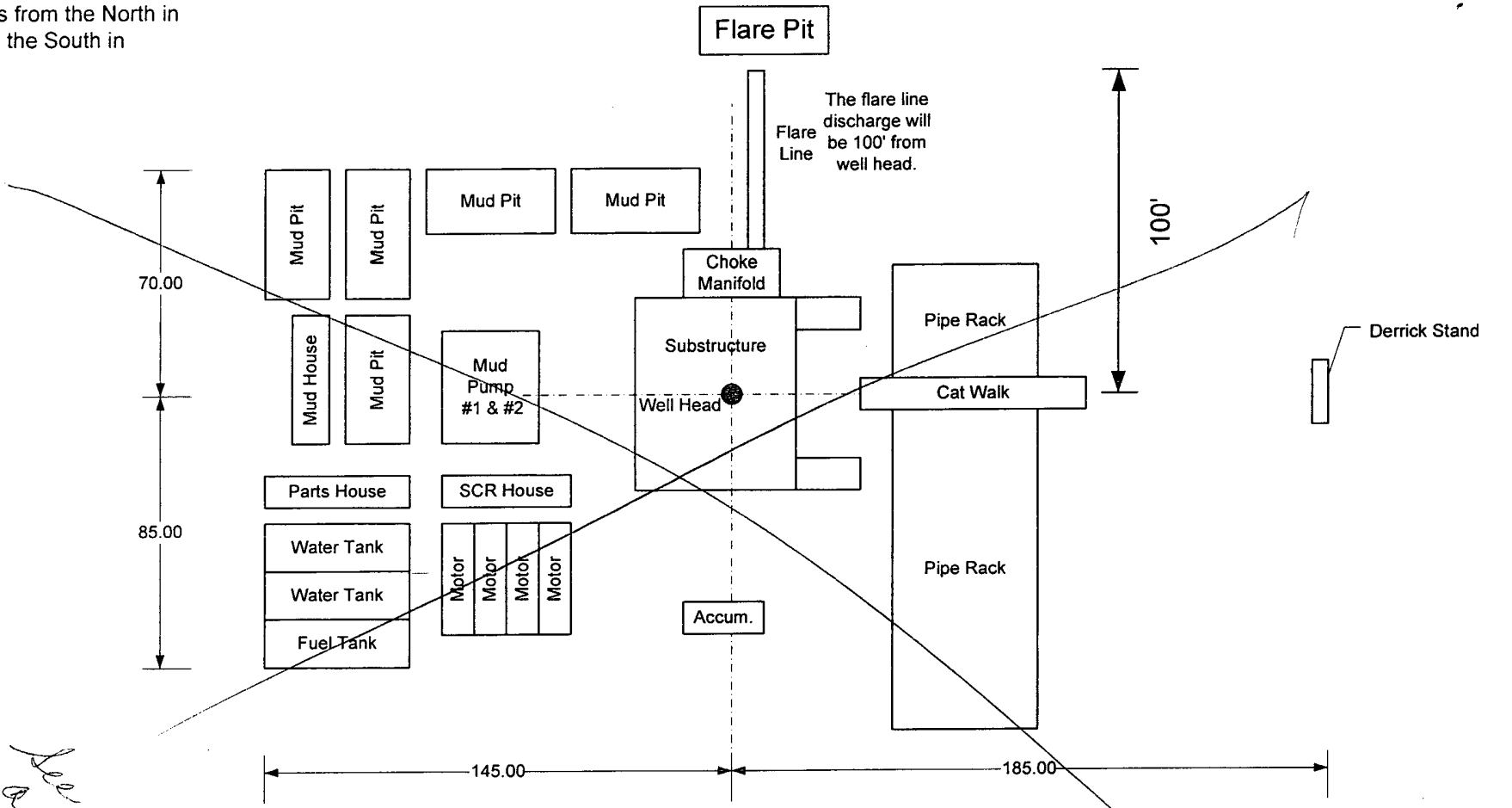


MILLARD DECK ESTATE 28 FEDERAL 1

Chesapeake Operating, Inc			
General Rig Layout			
SIZE	FSCM NO	DWG NO	REV
SCALE Not to Scale		SHEET 1 OF 1	

Revised EXHIBIT D

Prevailing Winds from the North in Winter and from the South in Summer.



See Revised as per Todd 6/14/06 CR

EXHIBIT 2

Chesapeake Operating, Inc			
General Rig Layout			
SIZE	FSCM NO	DWG NO	REV
SCALE Not to Scale		SHEET 1 OF 1	

BLOWOUT PREVENTOR SCHEMATIC

CHESAPEAKE OPERATING INC

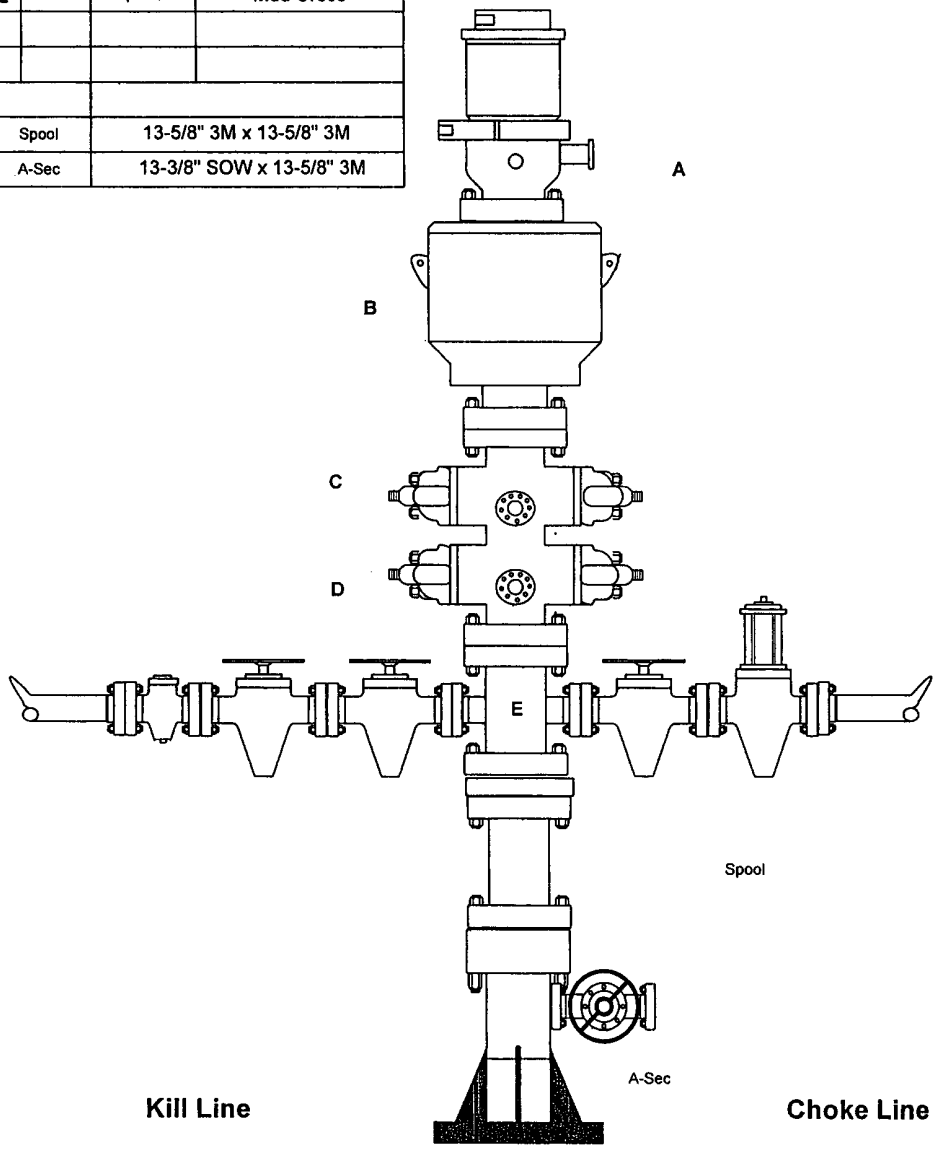
WELL : **Millard Deck Estate #1**

RIG :

COUNTY : **Lea** **STATE: New Mexico**

OPERATION: Drill out below 13-3/8" Casing

	SIZE	PRESSURE	DESCRIPTION
A	13-5/8"	500#	Rot Head
B	13-5/8"	3,000#	Annular
C	13-5/8"	3,000#	Pipe Rams
D	13-5/8"	3,000#	Blind Rams
E	13-5/8"	3,000#	Mud Cross
Spool		13-5/8" 3M x 13-5/8" 3M	
A-Sec		13-3/8" SOW x 13-5/8" 3M	



Kill Line

SIZE	PRESSURE	DESCRIPTION
2"	3,000#	Check Valve
2"	3,000#	Gate Valve
2"	3,000#	Gate Valve

Choke Line

SIZE	PRESSURE	DESCRIPTION
4"	3,000#	Gate Valve
4"	3,000#	HCR Valve

EXHIBIT F1

BLOWOUT PREVENTOR SCHEMATIC

CHESAPEAKE OPERATING INC

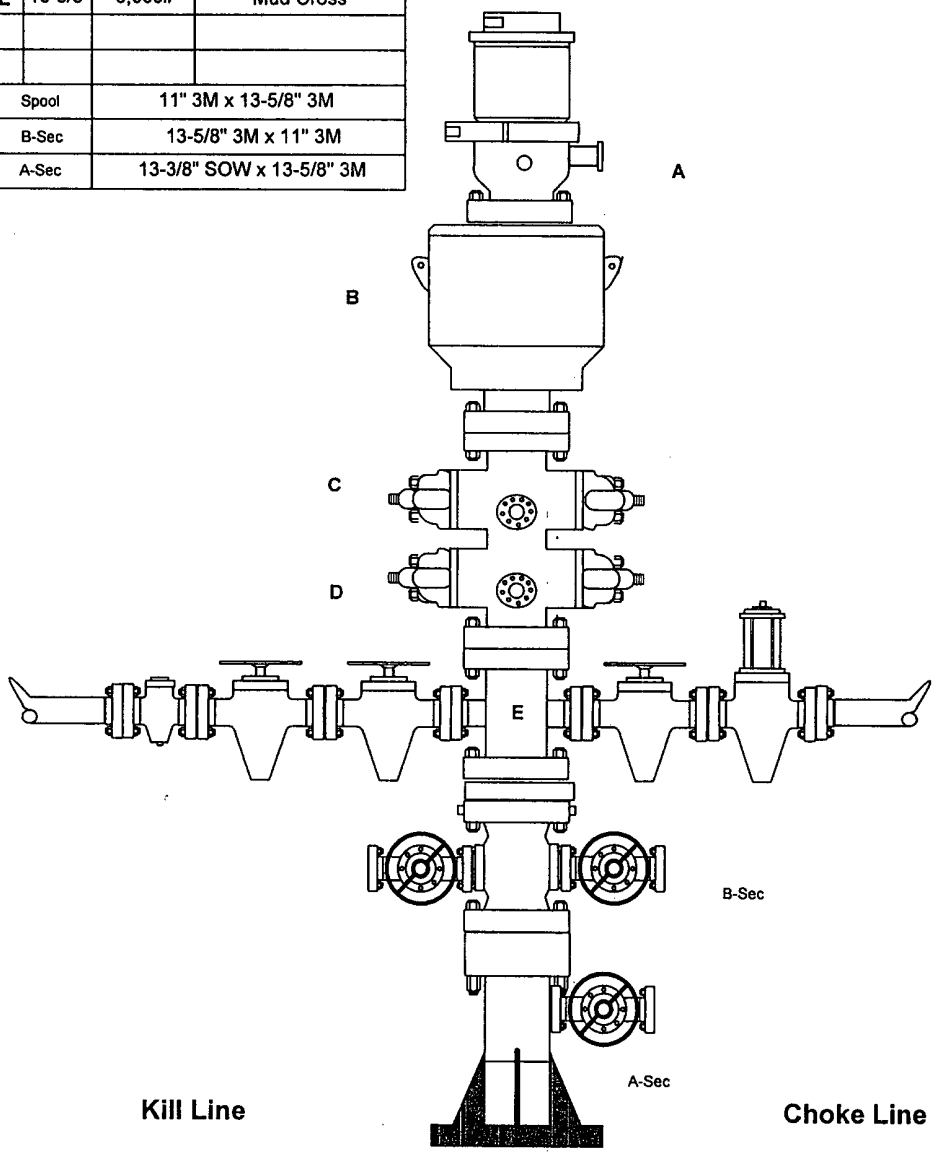
WELL : **Millard Deck Estate #1**

RIG :

COUNTY : **Lea** **STATE: New Mexico**

OPERATION: Drill out below 8-5/8" Casing

	SIZE	PRESSURE	DESCRIPTION
A	13-5/8"	500#	Rot Head
B	13-5/8"	3,000#	Annular
C	13-5/8"	3,000#	Pipe Rams
D	13-5/8"	3,000#	Blind Rams
E	13-5/8"	3,000#	Mud Cross
Spool		11" 3M x 13-5/8" 3M	
B-Sec		13-5/8" 3M x 11" 3M	
A-Sec		13-3/8" SOW x 13-5/8" 3M	



Kill Line

SIZE	PRESSURE	DESCRIPTION
2"	3,000#	Check Valve
2"	3,000#	Gate Valve
2"	3,000#	Gate Valve

Choke Line

SIZE	PRESSURE	DESCRIPTION
4"	3,000#	Gate Valve
4"	3,000#	HCR Valve

EXHIBIT F-2

Permian District

NM-Lea-Strawn project
Millard Deck Estate #1
Millard
Wellbore #1

Plan: Plan #1

Survey Report - Geographic

18 May, 2006

EXHIBIT G

Chesapeake Energy Corporation

Survey Report - Geographic

Company:	Permian District	**Local Co-ordinate Reference:**	Well Millard
Project:	NM-Lea-Strawn project	**TVD Reference:**	WELL @ 0.0ft (Original Well Elev)
Site:	Millard Deck Estate #1	**MD Reference:**	WELL @ 0.0ft (Original Well Elev)
Well:	Millard	**North Reference:**	True
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	Drilling Database

Project NM-Lea-Strawn project

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site Millard Deck Estate #1

Site Position:		**Northing:**	m	**Latitude:**	
From:	None	**Easting:**	m	**Longitude:**	
Position Uncertainty:	ft	**Slot Radius:**	in	**Grid Convergence:**	0.00 °

Well Millard

Well Position	**+N/-S**	0.0 ft	**Northing:**	0.00 m	**Latitude:**	30° 59' 24.512 N
	+E/-W	0.0 ft	**Easting:**	0.00 m	**Longitude:**	105° 55' 44.137 W
Position Uncertainty		ft	**Wellhead Elevation:**	ft	**Ground Level:**	0.0 ft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	User Defined	5/18/2006	0.00	0.00	0

Design Plan #1

Audit Notes:

Version:		**Phase:**	PROTOTYPE	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	0.00

Survey Tool Program **Date** 5/18/2006

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	10,000.0	Plan #1 (Wellbore #1)		

Chesapeake Energy Corporation

Survey Report - Geographic

Company:	Permian District	**Local Co-ordinate Reference:**	Well Millard
Project:	NM-Lea-Strawn project	**TVD Reference:**	WELL @ 0.0ft (Original Well Elev)
Site:	Millard Deck Estate #1	**MD Reference:**	WELL @ 0.0ft (Original Well Elev)
Well:	Millard	**North Reference:**	True
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	Drilling Database

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (m)	Map Easting (m)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
100.0	0.00	0.00	100.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
700.0	0.00	0.00	700.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
800.0	0.00	0.00	800.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
900.0	0.00	0.00	900.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W

Chesapeake Energy Corporation

Survey Report - Geographic

Company:	Permian District	**Local Co-ordinate Reference:**	Well Millard
Project:	NM-Lea-Strawn project	**TVD Reference:**	WELL @ 0.0ft (Original Well Elev)
Site:	Millard Deck Estate #1	**MD Reference:**	WELL @ 0.0ft (Original Well Elev)
Well:	Millard	**North Reference:**	True
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	Drilling Database

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (m)	Map Easting (m)	Latitude	Longitude
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.00	0.00	30° 59' 24.512 N	105° 55' 44.137 W
6,100.0	2.00	35.36	6,100.0	1.4	1.0	0.43	0.31	30° 59' 24.526 N	105° 55' 44.126 W
6,200.0	4.00	35.36	6,199.8	5.7	4.0	1.72	1.26	30° 59' 24.568 N	105° 55' 44.091 W
6,300.0	6.00	35.36	6,299.5	12.8	9.1	3.86	2.82	30° 59' 24.638 N	105° 55' 44.033 W
6,362.5	7.25	35.36	6,361.5	18.7	13.3	5.64	4.12	30° 59' 24.696 N	105° 55' 43.985 W
6,400.0	7.15	35.36	6,398.7	22.5	16.0	6.79	4.97	30° 59' 24.734 N	105° 55' 43.954 W
6,500.0	6.87	35.36	6,498.0	32.5	23.0	9.79	7.16	30° 59' 24.833 N	105° 55' 43.873 W
6,600.0	6.60	35.36	6,597.3	42.0	29.8	12.68	9.27	30° 59' 24.928 N	105° 55' 43.795 W
6,700.0	6.33	35.36	6,696.7	51.2	36.3	15.45	11.30	30° 59' 25.018 N	105° 55' 43.720 W
6,800.0	6.05	35.36	6,796.1	60.0	42.6	18.10	13.24	30° 59' 25.105 N	105° 55' 43.648 W
6,900.0	5.78	35.36	6,895.5	68.4	48.5	20.63	15.09	30° 59' 25.189 N	105° 55' 43.580 W
7,000.0	5.50	35.36	6,995.1	76.4	54.2	23.05	16.86	30° 59' 25.268 N	105° 55' 43.514 W
7,100.0	5.23	35.36	7,094.6	84.0	59.6	25.35	18.55	30° 59' 25.343 N	105° 55' 43.452 W
7,200.0	4.96	35.36	7,194.2	91.3	64.8	27.54	20.14	30° 59' 25.415 N	105° 55' 43.393 W
7,300.0	4.68	35.36	7,293.9	98.1	69.6	29.60	21.65	30° 59' 25.483 N	105° 55' 43.337 W
7,400.0	4.41	35.36	7,393.6	104.6	74.2	31.55	23.08	30° 59' 25.547 N	105° 55' 43.285 W
7,500.0	4.13	35.36	7,493.3	110.7	78.5	33.38	24.42	30° 59' 25.607 N	105° 55' 43.235 W
7,600.0	3.86	35.36	7,593.0	116.3	82.6	35.10	25.67	30° 59' 25.663 N	105° 55' 43.189 W
7,700.0	3.58	35.36	7,692.8	121.6	86.3	36.70	26.84	30° 59' 25.715 N	105° 55' 43.146 W
7,800.0	3.31	35.36	7,792.7	126.5	89.8	38.17	27.92	30° 59' 25.764 N	105° 55' 43.106 W
7,900.0	3.04	35.36	7,892.5	131.1	93.0	39.54	28.92	30° 59' 25.809 N	105° 55' 43.069 W
8,000.0	2.76	35.36	7,992.4	135.2	95.9	40.78	29.83	30° 59' 25.849 N	105° 55' 43.035 W
8,100.0	2.49	35.36	8,092.3	138.9	98.6	41.91	30.65	30° 59' 25.886 N	105° 55' 43.005 W
8,200.0	2.21	35.36	8,192.2	142.3	101.0	42.92	31.39	30° 59' 25.919 N	105° 55' 42.978 W
8,300.0	1.94	35.36	8,292.1	145.2	103.1	43.81	32.04	30° 59' 25.949 N	105° 55' 42.954 W
8,400.0	1.67	35.36	8,392.1	147.8	104.9	44.58	32.61	30° 59' 25.974 N	105° 55' 42.933 W
8,500.0	1.39	35.36	8,492.0	150.0	106.4	45.24	33.09	30° 59' 25.996 N	105° 55' 42.915 W
8,600.0	1.12	35.36	8,592.0	151.8	107.7	45.78	33.49	30° 59' 26.013 N	105° 55' 42.900 W
8,700.0	0.84	35.36	8,692.0	153.1	108.7	46.20	33.79	30° 59' 26.027 N	105° 55' 42.889 W
8,800.0	0.57	35.36	8,792.0	154.2	109.4	46.50	34.02	30° 59' 26.037 N	105° 55' 42.881 W
8,900.0	0.30	35.36	8,892.0	154.8	109.8	46.69	34.15	30° 59' 26.043 N	105° 55' 42.876 W
9,000.0	0.02	35.36	8,992.0	155.0	110.0	46.76	34.20	30° 59' 26.045 N	105° 55' 42.874 W
9,008.0	0.00	0.00	9,000.0	155.0	110.0	46.76	34.20	30° 59' 26.045 N	105° 55' 42.874 W
9,100.0	0.00	0.00	9,092.0	155.0	110.0	46.76	34.20	30° 59' 26.045 N	105° 55' 42.874 W
9,200.0	0.00	0.00	9,192.0	155.0	110.0	46.76	34.20	30° 59' 26.045 N	105° 55' 42.874 W
9,300.0	0.00	0.00	9,292.0	155.0	110.0	46.76	34.20	30° 59' 26.045 N	105° 55' 42.874 W
9,400.0	0.00	0.00	9,392.0	155.0	110.0	46.76	34.20	30° 59' 26.045 N	105° 55' 42.874 W
9,500.0	0.00	0.00	9,492.0	155.0	110.0	46.76	34.20	30° 59' 26.045 N	105° 55' 42.874 W
9,600.0	0.00	0.00	9,592.0	155.0	110.0	46.76	34.20	30° 59' 26.045 N	105° 55' 42.874 W
9,700.0	0.00	0.00	9,692.0	155.0	110.0	46.76	34.20	30° 59' 26.045 N	105° 55' 42.874 W
9,800.0	0.00	0.00	9,792.0	155.0	110.0	46.76	34.20	30° 59' 26.045 N	105° 55' 42.874 W
9,900.0	0.00	0.00	9,892.0	155.0	110.0	46.76	34.20	30° 59' 26.045 N	105° 55' 42.874 W
10,000.0	0.00	0.00	9,992.0	155.0	110.0	46.76	34.20	30° 59' 26.045 N	105° 55' 42.874 W

Checked By: _____ Approved By: _____ Date: _____

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

1. EXISTING ROADS

   a. Existing county and lease roads will be used to enter proposed access road.
   b. Location, access and vicinity plats attached hereto - See Exhibit A-1_to_ A-4.

2. PLANNED ACCESS ROADS

   a. A new access road 49' in length and 14' in travel way width with a maximum disturbance area of 30' will be built coming off an existing access road in a easterly direction. See Exhibit A-2. The road will be built in accordance with guidelines set forth in the BLM Onshore Orders.
   b. Any required turnouts will be constructed using BLM guidelines.
   c. A locking gate will be installed at the site entrance.
   d. Any fences cut will be repaired. Cattle guards will be installed, if needed.
   e. 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.
   f. Driving directions are from the intersection of Co. Rd. E-21 (Delaware Basin) and Co. Rd. E-21 (Weaver Rd) go East on Delaware Basin Road approx. 2.0 miles. Turn right and go South approx. 2.4 miles. Turn right and go West approx. 0.4 miles. Turn right and go North approx. 0.2 miles. This location is approx 180 feet West.

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

4. LOCATION OF PRODUCTION FACILITIES
   It is anticipated that production facilities will be located on the well pad as product will be sold at the wellhead and/or tank battery. Targa or Duke will lay pipeline to us – See Exhibit C.

5. 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.

6. CONSTRUCTION MATERIALS
No construction materials will be used from Section 28-22S-36E. All material (i.e. shale) will be acquired from private or commercial sources.

7. METHODS FOR HANDLING WASTE DISPOSAL
An in-ground, lined pit will be utilized during the drilling of this well. . **Propose to V-Door North Northwest and Pits South Southwest, cut Northeast corner off and turn counter clockwise to fit between the pipelines per request of BLM.**
All fluids and cuttings will be disposed of in accordance with New Mexico Oil Conservation Division rules and regulations.

8. ANCILLARY FACILITIES
None.

9. WELLSITE LAYOUT
The proposed site layout plat is attached showing rig orientation and equipment location. See Exhibit F.

10. 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.

Backfilling leveling, and contouring are planned as soon as the drilling rig and steel tanks are removed. Wastes and spoils materials will be buried 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 drilling rig is removed.

11. MINERAL OWNERSHIP
United States of America
Department of Interior
Bureau of Land Management

SURFACE OWNERSHIP
Millard Deck
3903 Bellaire Blvd
Houston, TX 77025
(Chesapeake has an agreement with the surface owner.)

12. ADDITIONAL INFORMATION

A Class III cultural resource inventory report was prepared by Danny Boone of Boone Archaeological Services, LLC, for the proposed location and new access road. Clearance has been recommended. See Exhibit G.

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

Drilling and Completion Operations
Jarvis Hensley
District Manager – Northern Permian
P.O. Box 18496
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Assett Manager
Jeff Finnell
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Oklahoma City, OK 73154-0496
405-767-4347 (OFFICE)
405-879-7930 (FAX)
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Regulatory Compliance
Linda Good
Regulatory Compliance Analyst
P.O. Box 18496
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Geologist
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405-810-2660 (FAX)
rmartin@chkenergy.com

14. CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this surface use plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed will be performed by operator (including contractors and subcontractors) submitting the APD, in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

By: _____

Henry Hood
Sr Vice President-Land & Legal & General Counsel

Date: 6/5/06

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

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (CFR 43, Part 3160) and the approved Application for Permit to Drill. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling and completion operations.

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

1. FORMATION TOPS

The estimated tops of important geologic markers are as follows:

Formation	Depth	Subsea
Rustler	1350'	2168
Salt	1454'	2064
**Yates	3162'	356
**Queen	3738'	-220
Glorieta	5828'	-2310
*Strawn	9261'	-5743
TD	**10000'**	

2. ESTIMATED DEPTH OF WATER, OIL GAS & OTHER MINERAL BEARING FORMATIONS

The estimated depths at which the top and bottom of the anticipated water, oil, gas or other mineral bearing formations are expected to be encountered are as follows:

Substance	Formation	Depth
Oil/Gas	Lower Wolfcamp	9000-9100
Oil/Gas	Strawn	9400-9420

All shows of fresh water and minerals will be reported and protected.

3. BOP EQUIPMENT: 3,000**# System**

Chesapeake Operating, Inc.'s minimum specifications for pressure control equipment are as follows:

I. BOP, Annular, Choke Manifold, Pressure Test

A. Equipment
1. The equipment to be tested includes all of the following that is installed on the well. See Exhibit H and I.
(a) Ram-type and annular preventers,
(b) Choke manifolds and valves,
(c) Kill lines and valves, and
(d) Upper and lower kelly cock valves, inside BOP's and safety valves.

B. Test Frequency
1. All tests should be performed with clear **water**,
(a) when installed,
(b) before drilling out each casing string,
(c) at any time that there is a repair requiring a pressure seal to be broken in the assembly, and
(d) at least once every **30 days** while drilling.

C. Test Pressure
1. In some drilling operations, the pressures to be used for low and high-pressure testing of preventers and casing may be different from those given below due to governmental regulations, or approved local practices.
2. If an individual component does not test at the low pressure, **do not,** test to the high pressure and then drop back down to the low pressure.
3. All valves located downstream of a valve being tested must be placed in the open position.
4. All equipment will be tested with an initial "low pressure" test at 250 psi.
5. The subsequent "high pressure" test will be conducted at the rated working pressure of the equipment for all equipment except the annular preventer.
6. The "high pressure" test for the annular preventer will be conducted at 70% of the rated working pressure.
7. A record of all pressures will be made on a pressure-recording chart.

D. Test Duration
1. In each case, the individual components should be monitored for leaks for **5 minutes,** with no observable pressure decline, once the test pressure as been applied.

II. Accumulator Performance Test

A. Scope
1. The purpose of this test is to check the capabilities of the BOP control systems, and to detect deficiencies in the hydraulic oil volume and recharge time.

B. Test Frequency

1. The accumulator is to be tested each time the BOP's are tested, or any time a major repair is performed.

C. Minimum Requirements

1. The accumulator should be of sufficient volume to supply 1.5 times the volume to close and hold all BOP equipment in sequence, **without recharging** and the **pump turned off**, and have remaining pressures of **200 PSI above the precharge pressure**.

2. Minimum precharge pressures for the various accumulator systems per **manufacturers recommended specifications** are as follows:

System Operating Pressures	Precharge Pressure
1,500 PSI	750 PSI
2,000 PSI	1,000 PSI
3,000 PSI	1,000 PSI

3. Closing times for the Hydril should be less than **20 seconds**, and for the ram-type preventers less than **10 seconds**.

4. System Recharge time should not exceed **10 minutes**.

D. Test Procedure

1. Shut accumulator pumps off and record accumulator pressure.

2. In sequence, close the annular and one set of properly sized pipe rams, and open the HCR valve.
3. Record time to close or open each element and the remaining accumulator pressure after each operation.

4. Record the remaining accumulator pressure at the end of the test sequence. Per the previous requirement, this pressure **should not be less** than the following pressures:

System Pressure	Remaining Pressure At Conclusion of Test
1,500 PSI	950 PSI
2,000 PSI	1,200 PSI
3,000 PSI	1,200 PSI

5. Turn the accumulator pumps on and record the recharge time. This time should not exceed **10 minutes.**

6. Open annular and ram-type preventers. Close HCR valve.

7. Place all 4-way control valves in **full open** or **full closed** position. **Do not leave in neutral position**.

4. CASING AND CEMENTING PROGRAM

a. The proposed casing program will be as follows:

Purpose	Interval	Hole Size	Casing Size	Weight	Grade	Thread	Condition
Surface	0-400	17 ½"	13 3/8"	48#	H-40	STC	NEW
Intermediate	0-4000	11	8 5/8"	32#	J55	LTC	NEW
Production	0-10,000	7 7/8"	5 ½"	17#	L-80	LTC	NEW

b. Casing design subject to revision based on geologic conditions encountered.

c. The cementing program will be as follows:

Interval	Type	Amount	Yield	Washout	Excess
0'-400'	Class C + Additives	490	1.34	75	100
0'- 4,000'	Class C 50/50 Poz + Additives	645+265	2.03/1.26	50	75
3,500 – 10,000'	Class H + Additives	605+145	2.3/1.57	10	30

5. MUD PROGRAM

a. The proposed circulating mediums to be used in drilling are as follows:

Interval	Mud Type	Mud Weight	Viscosity	Fluid Loss
0-400	FW	8.4 – 9.0	27-40	NC
400-1,350	FW/Gel	8.4 – 8.7	28-30	NC
1,350-4,000	Brine	9.7 – 10	28-30	NC
4,000-9,000	FW	8.3-8.7	28-30	25-30
9,000-10,000	FW/Cut Brine	8.7-9.1	30-36	20-25

An in-ground, lined pit will be utilized during the drilling of this well. **Propose to V-Door North Northwest and Pits South Southwest, cut Northeast corner off and turn counter clockwise to fit between the pipelines per request of BLM.** All fluids and cuttings will be disposed of in accordance with New Mexico Oil Conservation Division rules and regulations. The proposed Pit dimensions are 150' X 15' X 10'.

A mud test shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH.

6. TESTING, LOGGING AND CORING

The anticipated type and amount of testing, logging and coring are as follows:

a. Drill stem tests are not planned.

b. The logging program will consist of GR, Density, Neutron Pe & High resolution Induction, Dual Laterolog and Sonic.

c. Cores samples are not planned.

7. ABNORMAL PRESSURES AND HYDROGEN SULFIDE

a. The estimated bottom hole pressures is 4650 psi. No abnormal pressures or temperatures are anticipated.
b. Hydrogen sulfide gas is not anticipated.

CONDITIONS OF APPROVAL - DRILLING

Operator's Name:	**CHESAPEAKE OPERATING, INC.**
Well Name & No.	**1 – MILLARD DECK ESTATE 28 FEDERAL**
Location:	**965' FNL & 1590' FEL – SEC 28 – T22S – R36E – LEA COUNTY (SHL)**
	810' FNL & 1480' FEL – SEC 28 – T22S – R36E – LEA COUNTY (BHL)
Lease:	**LC-30133B**

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Roswell Field Office, 2909 West Second St., Roswell NM 88201, (505) 627-0272 for wells in Chaves and Roosevelt Counties; the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 234-5909 or (505) 361-2822 (After hours) - for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:

A. Spudding

B. Cementing casing: **13-3/8** inch **8-5/8** inch **5-1/2** inch

C. BOP tests

2. **No Hydrogen Sulfide (H2S) gas has been reported or is known to exist in Sec 28 – T22S – R36E.**

3 Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

4. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.

5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

II. CASING:

1. The **13-3/8** inch surface casing shall be set at **400 feet**, below usable water and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string. **Note: The operator has elected to use the Alternative Conditions of Approval – Drilling (attached).**

2. The minimum required fill of cement behind the **8-5/8** inch salt protection casing is **circulate cement to the surface.**

3. The minimum required fill of cement behind the **5-1/2** inch production casing is **cement shall extend upward a minimum of 500 feet above the uppermost hydrocarbon bearing interval.**

III. PRESSURE CONTROL:

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the **13-3/8** casing. Any defective equipment shall be repaired or replaced.

2. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling the surface and salt protection casing shall be **2000** psi. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling below the **8-5/8** inch casing shall be **3000** psi.

3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.
- The tests shall be done by an independent service company.
- The results of the test shall be reported to the appropriate BLM office.
- Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
- Testing must be done in a safe workman-like manner. Hard line connections shall be required.
- BOPE must be tested prior to drilling into the **Wolfcamp** Formation by an independent service company.

IV. DRILLING MUD:

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** Formation, and shall be used until production casing is run and cemented. Monitoring equipment shall consist of the following:

1. Recording pit level indicator to indicate volume gains and losses.
2. Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
3. Flow-sensor on the flow line to warn of abnormal mud returns from the well.

ALTERNATIVE CONDITIONS OF APPROVAL - DRILLING

Drilling Fluids, Casing and Cementing Requirements for Most of Lea County:

Casing and Cementing

Surface casing is to be set at a sufficient depth to protect useable water zones and cement circulated to surface. In areas where the salt section (Salado) is present, surface casing should be set at least 25 feet into the top of the Rustler Anhydrite and cement circulated to the surface.

As an alternative, surface casing may be set through the Santa Rosa Formation or other potable water bearing zones and circulate cement to surface. For wells requiring an intermediate casing string, such string shall be cemented to the ground surface. In the case where intermediate casing is not required the operator shall case and cement the production hole to the ground surface.

While drilling from the surface casing to the Rustler formation it is recommended that operators periodically sweep the hole with viscous low water loss pills to help build a filter cake across useable water zones in the redbeds.

Drilling Fluid

Fresh water or fresh water spud mud shall be used to drill to surface casing depth. If surface casing is set at a lesser depth than the top of the Rustler formation., fresh water spud mud may be used to drill down to the first salt in the Rustler Formation. after which brine or fresh water may be used.

Non-toxic or biodegradable water based polymers, drilling paper, starch and gels may be used in the mud system in order to retard seepage into the redbeds.

Two to five percent diesel or crude oil may be used in the redbed section in order to control heaving shales and mudstones.

Caustics and Lime shall not be used in the red beds but may be added when the Rustler formation is reached. However, sodium carbonate maybe used for alkalinity or ph control while drilling the redbeds above the Rustler formation.

Additionally, questions of whether an additive may be used should be referred to the Roswell Field office.

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-144
June 1, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☐
Type of action: Registration of a pit or below-grade tank ☐ Closure of a pit or below-grade tank ☐

Operator: Chesapeake Operating Inc. Telephone: (432)687-2992 e-mail address: bcoffman@chkenergy.com
Address: P. O. Box 11050 Midland, TX 79702-8050
Facility or well name: Millard Deck Estate 28 Federal API#: 30-025-38103 U/lor Qtr/Qtr B Sec 28 T 22S R 36E
County: Lea Latitude Longitude NAD: 1927 ☐ 1983 ☐ Surface Owner Federal ☒ State ☐ Private ☐ Indian ☐

Pit	**Below-grade tank**	
Type: Drilling ☒ Production ☐ Disposal ☐ Workover ☐ Emergency ☐ Lined ☒ Unlined ☐ Liner type: Synthetic ☐ Thickness ____ mil Clay ☐ Pit Volume 12129 bbl	Volume: ____ bbl Type of fluid: ____ Construction material: ____ Double-walled, with leak detection? Yes ☐ If not, explain why not.	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) (0 points) 0
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes No	(20 points) (0 points) 0
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more	(20 points) (10 points) (0 points) 0
	Ranking Score (Total Points)	0

If this is a pit closure: (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if your are burying in place) onsite ☐ offsite ☐ If offsite, name of facility ____ (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface ____ ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

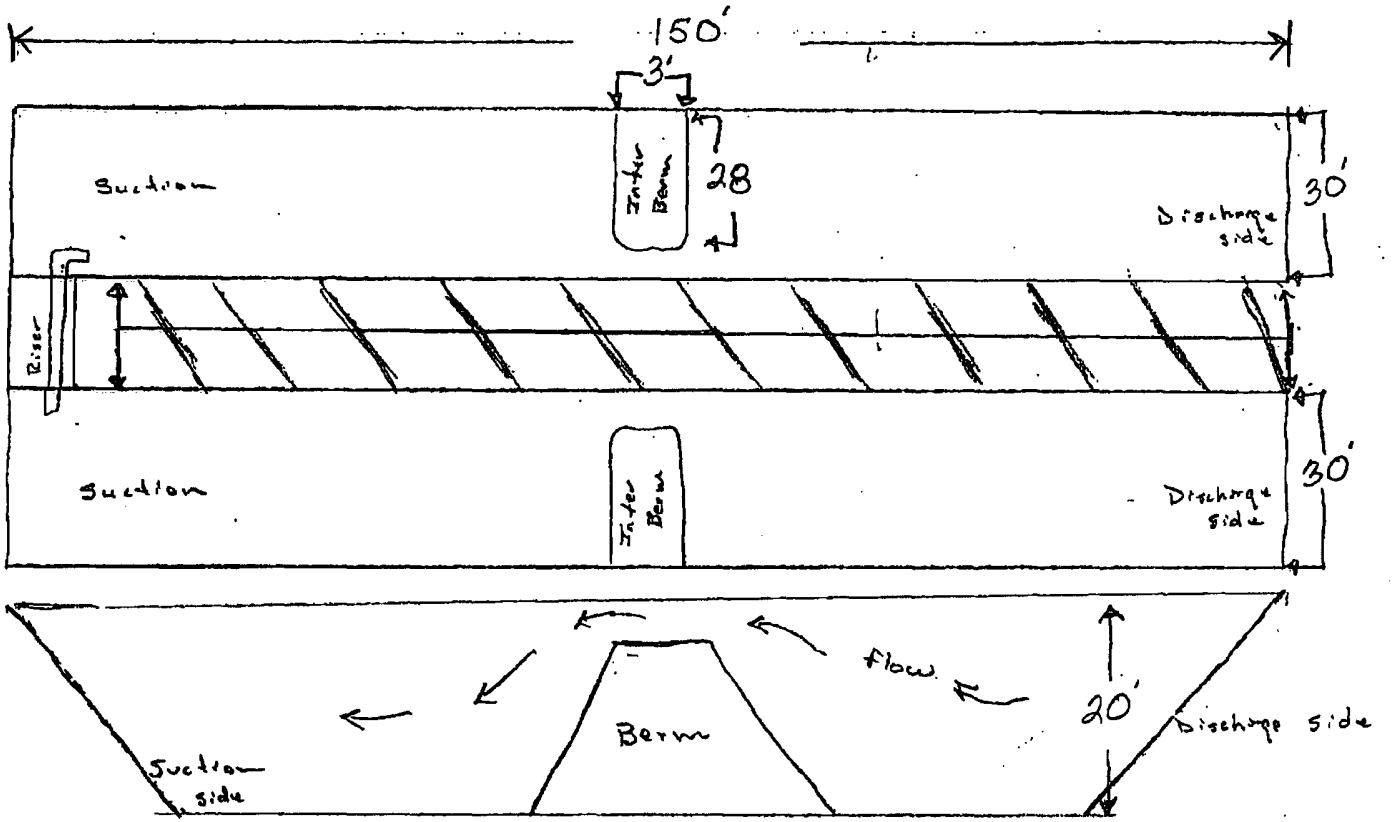
Additional Comments:

I hereby certify that the information above is true and complete to the best of my knowledge and belief. **I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.**
Date: 08/29/2006
Printed Name/Title Brenda Coffman Regulatory Analyst Signature Brenda Coffman

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:
Printed Name/Title PETROLEUM ENGINEER Signature Date: AUG 30 2006

Chesapeake Energy — Double Pit — Guideline 3A



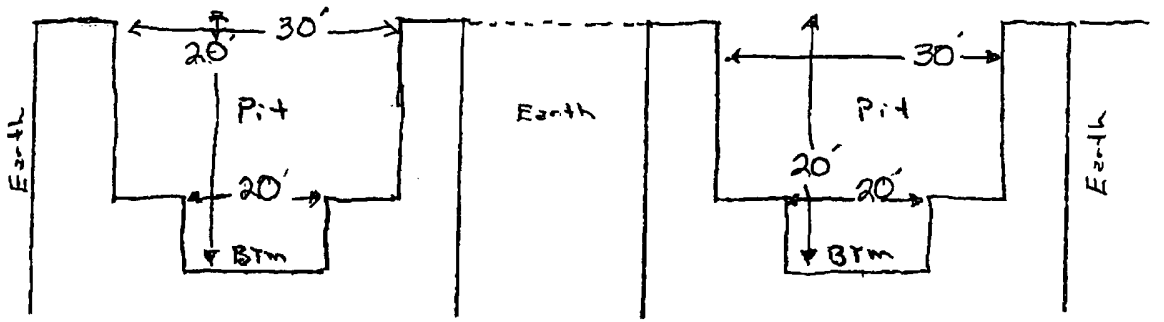
12 mm plastic over all

Top View

Side View

18' x 30' x 140' = 75600 ft³ ÷ 5.6146 = 13464.8 bbls x 2 = 26929.7 bbls, with 18' of fluid & cuttings in pits.

20' x 30' x 140' = 90000 ft³ ÷ 56146 = 16029.6 bbls x 2 = 32059.2 bbls with 20'



End cross section