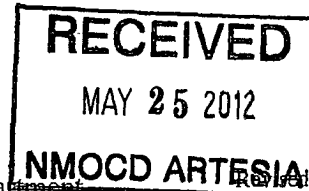


District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505



Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-40341		² Pool Code 50371 96526		³ Pool Name PIERCE CROSSING BONE SPRING West	
⁴ Property Code 50371		⁵ Property Name PLU REMUDA BASIN 32 23 30 STATE		⁶ Well Number Forty Number 21260, 135 IH	
⁷ OGRID No. 147179		⁸ Operator Name CHESAPEAKE OPERATING, INC.		⁹ Elevation 3241'	

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	32	23S	30E		150'	SOUTH	660'	WEST	EDDY

¹¹ Bottom Hole Location If Different From Surface

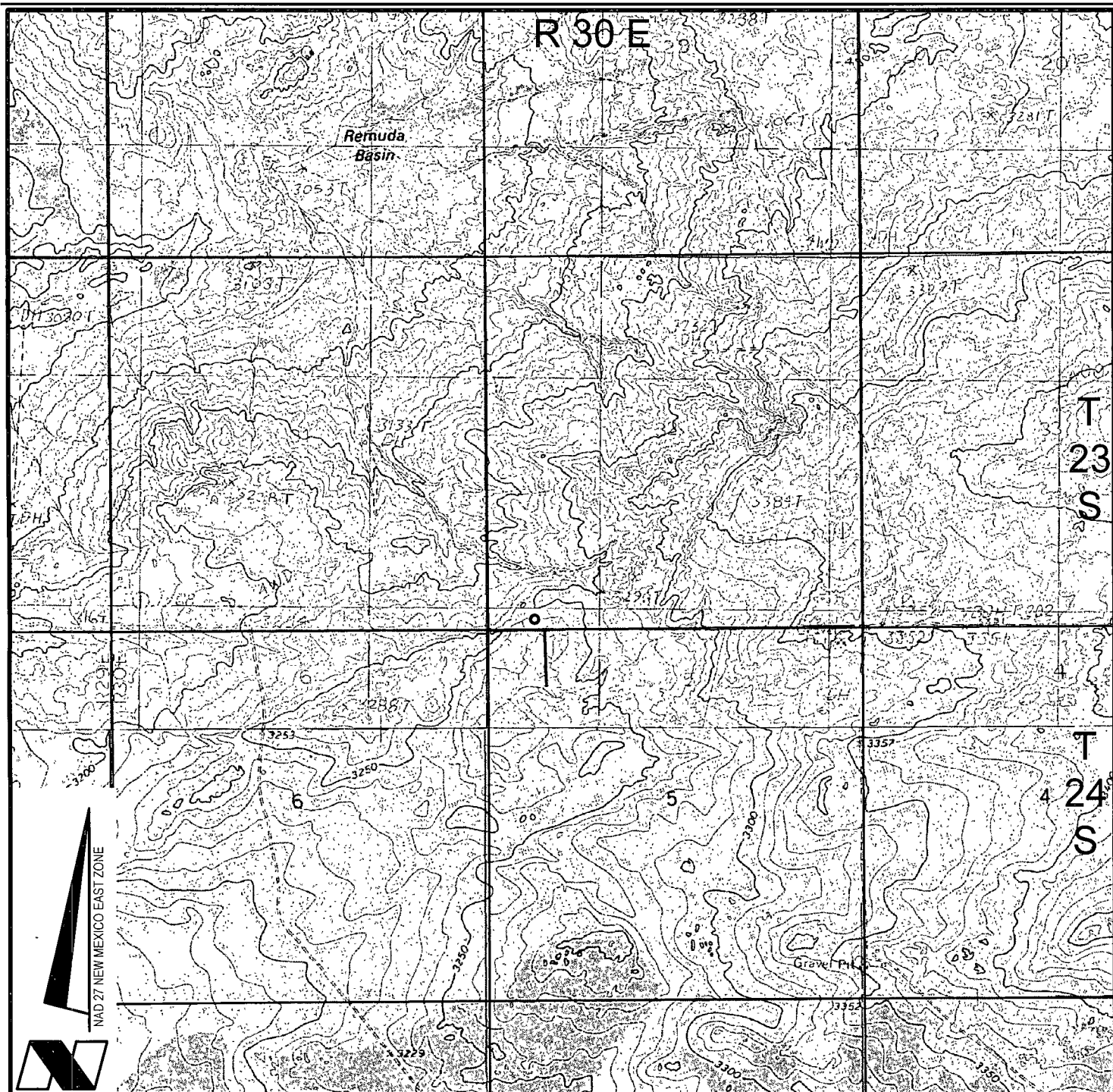
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	32	23S	30E		100'	NORTH	660'	WEST	EDDY

¹² Dedicated Acres 162.87	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
--	-------------------------------	----------------------------------	-------------------------

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.

	¹⁶ PROPOSED BOTTOM HOLE LOCATION X= 630,976 NAD 27 Y= 461,535 LAT. 32.268165 LONG. 103.909586 X= 672,160 NAD83 Y= 461,594 LAT. 32.268288 LONG. 103.910074	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained 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 a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature: <i>Bryan Arrant</i> Date: 05/24/2012 Printed Name: bryan.arrant@chk.com E-mail Address:
	PLU REMUDA BASIN 32 23 30 STATE NO 1H WELL X= 631,011 NAD 27 Y= 456,482 LAT. 32.254276 LONG. 103.909539 X= 672,194 NAD83 Y= 456,541 LAT. 32.254398 LONG. 103.910027 ELEVATION +3241' NAVD 88	

FIRST PROPOSED PERFORATIONS
330' FSL & 660' FWL



NOTE
THE CONTENTS OF THESE PLANS ARE INTENDED
EXCLUSIVELY FOR THE PURPOSE OF OBTAINING
ENVIRONMENTAL COMPLIANCE PERMITS

VICINITY MAP

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

CHESAPEAKE OPERATING, INC.
PLU REMUDA BASIN 32-23-30 STATE NO. 1H WELL
LOCATED 150' FSL AND 660' FWL
SECTION 32, T23S-R30E & SECTION 5, T24S-R30E
EDDY COUNTY, NEW MEXICO



Lafayette New Orleans Houston
135 Regency Sq Lafayette, LA 70508
Ph 337-237-2200 Fax 337-232-3299
www.fenstermaker.com

DRAWN BY BOF

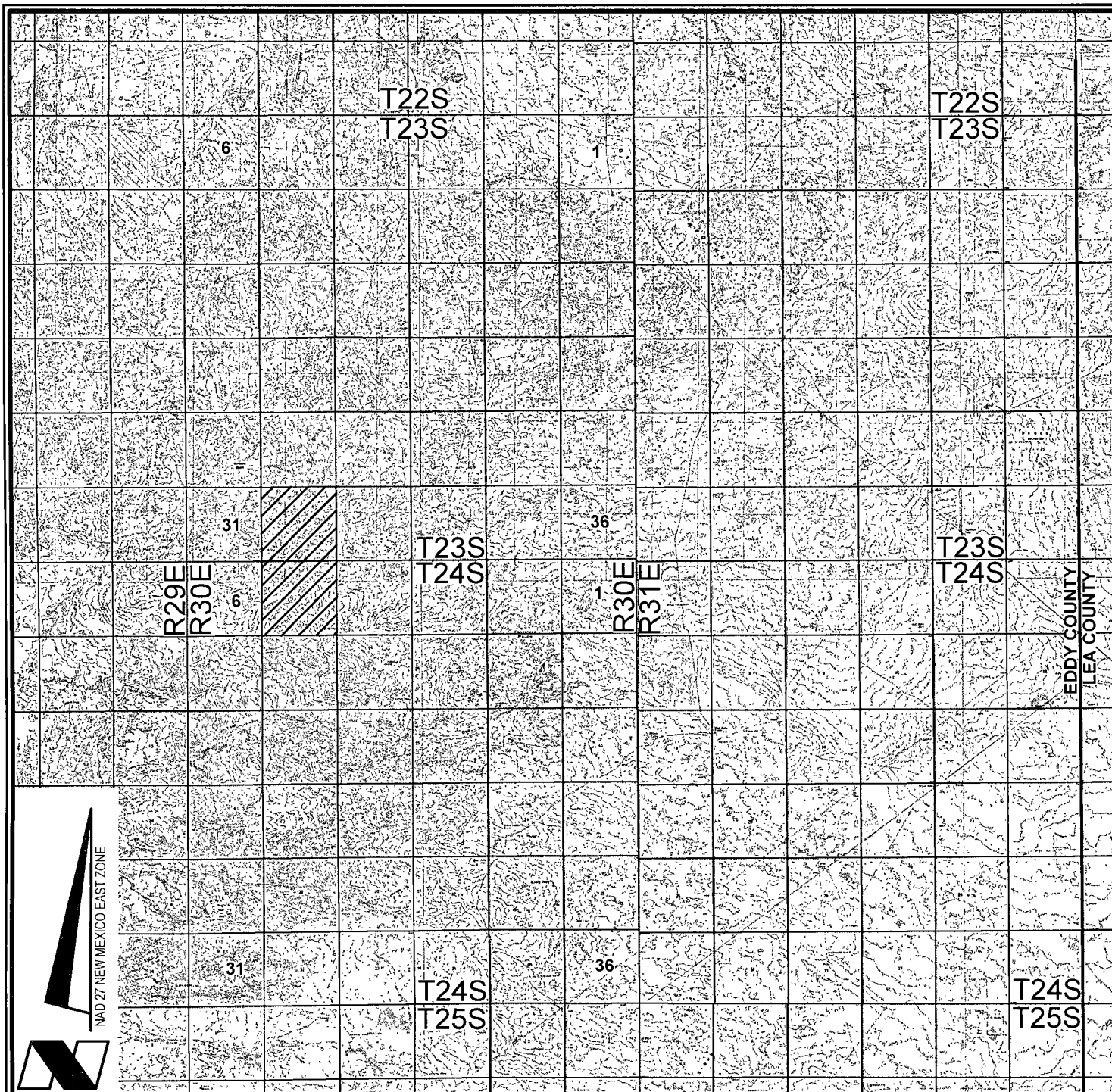
REVISED.

DATE MAY 17, 2012

PROJ MGR DBM

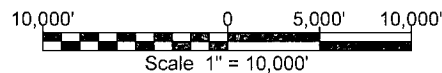
SHEET 1 OF 3 SHEETS

FILENAME: T\2012\2124894\DWG\PLU Remuda Basin 32-23-30 State 1H APD.dwg



NOTE
THE CONTENTS OF THESE PLANS ARE INTENDED
EXCLUSIVELY FOR THE PURPOSE OF OBTAINING
ENVIRONMENTAL COMPLIANCE PERMITS

VICINITY MAP



CHESAPEAKE OPERATING, INC.
PLU REMUDA BASIN 32-23-30 STATE NO. 1H WELL
LOCATED 150' FSL AND 660' FWL
SECTION 32, T23S-R30E & SECTION 5, T24S-R30E
EDDY COUNTY, NEW MEXICO



Lafayette New Orleans Houston
135 Regency Sq Lafayette, LA 70508
Ph 337-237-2200 Fax 337-232-3299
www.fenstermaker.com

DRAWN BY BOF

REVISED.

DATE MAY 17, 2012

PROJ. MGR DBM

SHEET 2 OF 3 SHEETS

FILENAME T:\2012\124894\DWG\PLU Remuda Basin 32-23-30 State 1H APD dwg



Drilling Engineer: Chris Gray

Superintendent: Daniel Gipson

Geologist: Chris Persellin

Well Name: PLU Remuda Basin 32-23-30 State 1H
Target: Lower Avalon
County, State: Eddy, NM

Surface Location: 150' FSL 660' FWL, Section 32, Township 23S, Range 30 E
BH Location: 100' FNL 660' FWL, Section 32, Township 23S, Range 30 E

SHL Latitude: 32 254398 SHL North: 456541
SHL Longitude: -103 910027 SHL East: 672194
BHL Latitude: 32 268288 BHL North: 461594
BHL Longitude: -103 910074 BHL East: 672160
Coordinates: NAD 83 Coordinates: NMSPCE

Drilling Rig: Cactus 120

Directional: Phoenix

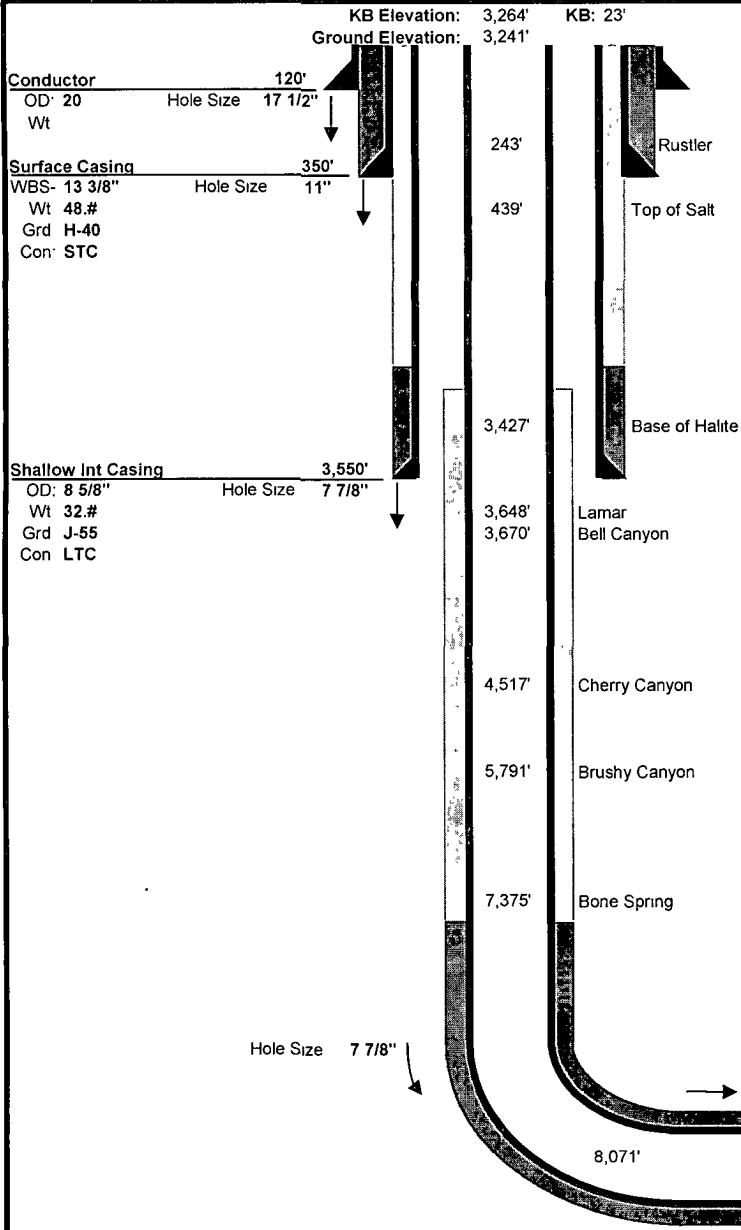
Drilling Mud: Nova

Cement: Schlumberger

Wellhead: Sunbelt

Property Number: 645556

AFE Number: 171203



Wellhead Equipment	
A Section	13-3/8" x 13-5/8" 5K SOW (Multibowl)
B Section	N/A (Multibowl)
C Section	11" 5K X 7-1/16" 10K w/10k gate valve
D Section	N/A
Required BOP Stack	13-5/8" 5K- Double, Annular, Rot Head w/orbit valve

Mud				
Depth	Type	Weight	F. Vis	FL
0' - 350'	Spud Mud	8.4 - 8.7	32 - 34	NC - NC
350' - 3,550'	Brine	9.5 - 10.1	28 - 29	NC - NC
3,550' - 7,746'	FW/Cut Brine	8.3 - 9	28 - 29	NC - NC
7,746' - 8,496'	FW/Cut Brine	8.3 - 9	32 - 36	10 - 20
8,496' - 13,071'	FW/Cut Brine	8.3 - 9	28 - 29	NC - NC

Cement							
Slurry	Top	Btm	Wt	Yld	%Exc	Bbl	Sx
Surface							
Single Slurry	0'	350'	13.5	1.73	250	127	414
Shallow Int							
Lead	0'	3,050'	12.0	1.99	250	456	1286
Tail	3,050'	3,550'	14.2	1.37	250	82	336
Production							
Lead	3,050'	7,746'	12.4	2.11	75	242	645
Tail	7,746'	13,071'	14.5	1.27	75	290	1281

Directional Plan						
Target Line:	8223' @ 0' VS w/90.0 deg inclination					
Target Window:	20' above, 20' below, 50' left, 50' right					
	MD	INC	AZM	TVD	VS	DLS
KOP	7,746'	0.00	0.00	7,746'	0'	0.00
EOB	8,496'	90.00	359.61	8,223'	477'	12.00
TD	13,071'	90.00	359.61	8,223'	5,053'	0.00
Hardlines:	Lateral- 330' from parallel lease lines Vertical- Actual Lease Lines					
Notes:	Please note SHL and BHL distance from lease lines					

LOGS	Type	Logs	Interval	Vendor
	Mud Log	2 man Mudlog	Int Csg to TD	Nomac
	OH	Triple Combo	Curve to Int Csg	TBD
	OH	GR/Neutron	Int Cas to Surf	TBD
	LWD	MWD Gamma	Curve and Lateral	Phoenix

Permian District

Poker Lake

PLU Remuda Basin 32-23-30 State 1H

Well #1

Wellbore #1

Plan: Plat

Standard Planning Report

24 May, 2012

Chesapeake Operating

Planning Report

Database:	Drilling Database	Local Co-ordinate Reference:	Well Well #1
Company:	Permian District	TVD Reference:	WELL @ 0.00ft (Original Well Elev)
Project:	Poker Lake	MD Reference:	WELL @ 0.00ft (Original Well Elev)
Site:	PLU Remuda Basin 32-23-30 State 1H	North Reference:	Grid
Well:	Well #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat		

Project:	Poker Lake, Eddy County, NM		
Map System:	US State Plane 1983	System Datum:	Ground Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	PLU Remuda Basin 32-23-30 State 1H
-------------	------------------------------------

Site Position:		Northing:	456,541.00 usft	Latitude:	32.254397
From:	Map	Easting:	672,194.00 usft	Longitude:	-103.910028
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.23 °

Well	Well #1
-------------	---------

Well Position	+N/-S	0.00 ft	Northing:	456,541.00 usft	Latitude:	32.254397
	+E/-W	0.00 ft	Easting:	672,194.00 usft	Longitude:	-103.910028
Position Uncertainty	0.00 ft	Wellhead Elevation:		Ground Level:	0.00 ft	

Wellbore	Wellbore #1
-----------------	-------------

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	5/23/2012	7.62	60.16	48,546

Design	Plat
---------------	------

Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	359.61

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7,745.53	0.00	0.00	7,745.53	0.00	0.00	0.00	0.00	0.00	0.00	
8,495.54	90.00	359.61	8,223.00	477.45	-3.21	12.00	12.00	0.00	359.61	
13,071.19	90.00	359.61	8,223.00	5,053.01	-34.00	0.00	0.00	0.00	0.00	0.00 RB 32-23-30 1H- BI

Chesapeake Operating

Planning Report

Database:	Drilling Database	Local Co-ordinate Reference:	Well Well #1
Company:	Permian District	TVD Reference:	WELL @ 0.00ft (Original Well Elev)
Project:	Poker Lake	MD Reference:	WELL @ 0.00ft (Original Well Elev)
Site:	PLU Remuda Basin 32-23-30 State 1H	North Reference:	Grid
Well:	Well #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00

Chesapeake Operating

Planning Report

Database:	Drilling Database	Local Co-ordinate Reference:	Well Well #1
Company:	Permian District	TVD Reference:	WELL @ 0 00ft (Original Well Elev)
Project:	Poker Lake	MD Reference:	WELL @ 0 00ft (Original Well Elev)
Site:	PLU Remuda Basin 32-23-30 State 1H	North Reference:	Grid
Well:	Well #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,400.00	0 00	0 00	5,400.00	0 00	0.00	0.00	0 00	0 00	0 00
5,500.00	0 00	0 00	5,500.00	0 00	0 00	0.00	0 00	0.00	0.00
5,600.00	0.00	0 00	5,600.00	0.00	0 00	0.00	0.00	0.00	0.00
5,700.00	0.00	0 00	5,700.00	0.00	0 00	0.00	0.00	0.00	0.00
5,800.00	0 00	0 00	5,800.00	0 00	0 00	0.00	0.00	0.00	0.00
5,900.00	0.00	0 00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0 00	6,000.00	0.00	0 00	0.00	0.00	0.00	0.00
6,100.00	0 00	0 00	6,100.00	0 00	0.00	0.00	0.00	0.00	0.00
6,200.00	0 00	0 00	6,200.00	0.00	0 00	0.00	0.00	0.00	0.00
6,300.00	0.00	0 00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	0 00	0 00	6,400.00	0 00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0 00	6,500.00	0 00	0.00	0.00	0.00	0.00	0.00
6,600.00	0.00	0 00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	0 00	0 00	6,700.00	0 00	0 00	0.00	0.00	0.00	0.00
6,800.00	0.00	0 00	6,800.00	0 00	0 00	0.00	0.00	0.00	0.00
6,900.00	0 00	0 00	6,900.00	0 00	0.00	0.00	0.00	0.00	0.00
7,000.00	0 00	0 00	7,000.00	0 00	0 00	0.00	0.00	0.00	0.00
7,100.00	0 00	0 00	7,100.00	0.00	0.00	0.00	0.00	0.00	0.00
7,200.00	0.00	0 00	7,200.00	0.00	0.00	0.00	0.00	0.00	0.00
7,300.00	0.00	0 00	7,300.00	0 00	0.00	0.00	0.00	0.00	0.00
7,400.00	0.00	0 00	7,400.00	0.00	0 00	0.00	0.00	0.00	0.00
7,500.00	0.00	0 00	7,500.00	0.00	0.00	0.00	0.00	0.00	0.00
7,600.00	0 00	0 00	7,600.00	0.00	0.00	0.00	0.00	0.00	0.00
7,700.00	0 00	0 00	7,700.00	0.00	0.00	0.00	0.00	0.00	0.00
7,745.53	0 00	0 00	7,745.53	0.00	0 00	0.00	0.00	0.00	0.00
7,800.00	6 54	359.61	7,799.88	3.10	-0.02	3.10	12.00	12.00	0.00
7,900.00	18.54	359.61	7,897.32	24.77	-0.17	24.77	12.00	12.00	0.00
8,000.00	30.54	359.61	7,988.12	66.22	-0.45	66.22	12.00	12.00	0.00
8,100.00	42.54	359.61	8,068.33	125.64	-0.85	125.64	12.00	12.00	0.00
8,200.00	54.54	359.61	8,134.42	200.44	-1.35	200.44	12.00	12.00	0.00
8,300.00	66.54	359.61	8,183.52	287.34	-1.93	287.35	12.00	12.00	0.00
8,400.00	78.54	359.61	8,213.47	382.56	-2.57	382.57	12.00	12.00	0.00
8,495.54	90.00	359.61	8,223.00	477.45	-3.21	477.47	12.00	12.00	0.00
8,500.00	90.00	359.61	8,223.00	481.92	-3.24	481.93	0.00	0.00	0.00
8,600.00	90.00	359.61	8,223.00	581.92	-3.92	581.93	0.00	0.00	0.00
8,700.00	90.00	359.61	8,223.00	681.91	-4.59	681.93	0.00	0.00	0.00
8,800.00	90.00	359.61	8,223.00	781.91	-5.26	781.93	0.00	0.00	0.00
8,900.00	90.00	359.61	8,223.00	881.91	-5.93	881.93	0.00	0.00	0.00
9,000.00	90.00	359.61	8,223.00	981.91	-6.61	981.93	0.00	0.00	0.00
9,100.00	90.00	359.61	8,223.00	1,081.91	-7.28	1,081.93	0.00	0.00	0.00
9,200.00	90.00	359.61	8,223.00	1,181.90	-7.95	1,181.93	0.00	0.00	0.00
9,300.00	90.00	359.61	8,223.00	1,281.90	-8.63	1,281.93	0.00	0.00	0.00
9,400.00	90.00	359.61	8,223.00	1,381.90	-9.30	1,381.93	0.00	0.00	0.00
9,500.00	90.00	359.61	8,223.00	1,481.90	-9.97	1,481.93	0.00	0.00	0.00
9,600.00	90.00	359.61	8,223.00	1,581.89	-10.64	1,581.93	0.00	0.00	0.00
9,700.00	90.00	359.61	8,223.00	1,681.89	-11.32	1,681.93	0.00	0.00	0.00
9,800.00	90.00	359.61	8,223.00	1,781.89	-11.99	1,781.93	0.00	0.00	0.00
9,900.00	90.00	359.61	8,223.00	1,881.89	-12.66	1,881.93	0.00	0.00	0.00
10,000.00	90.00	359.61	8,223.00	1,981.89	-13.34	1,981.93	0.00	0.00	0.00
10,100.00	90.00	359.61	8,223.00	2,081.88	-14.01	2,081.93	0.00	0.00	0.00
10,200.00	90.00	359.61	8,223.00	2,181.88	-14.68	2,181.93	0.00	0.00	0.00
10,300.00	90.00	359.61	8,223.00	2,281.88	-15.35	2,281.93	0.00	0.00	0.00
10,400.00	90.00	359.61	8,223.00	2,381.88	-16.03	2,381.93	0.00	0.00	0.00
10,500.00	90.00	359.61	8,223.00	2,481.87	-16.70	2,481.93	0.00	0.00	0.00

Chesapeake Operating

Planning Report

Database:	Drilling Database	Local Co-ordinate Reference:	Well Well #1
Company:	Permian District	TVD Reference:	WELL @ 0.00ft (Original Well Elev)
Project:	Poker Lake	MD Reference:	WELL @ 0.00ft (Original Well Elev)
Site:	PLU Remuda Basin 32-23-30 State 1H	North Reference:	Grid
Well:	Well #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,600.00	90.00	359.61	8,223.00	2,581.87	-17.37	2,581.93	0.00	0.00	0.00
10,700.00	90.00	359.61	8,223.00	2,681.87	-18.05	2,681.93	0.00	0.00	0.00
10,800.00	90.00	359.61	8,223.00	2,781.87	-18.72	2,781.93	0.00	0.00	0.00
10,900.00	90.00	359.61	8,223.00	2,881.86	-19.39	2,881.93	0.00	0.00	0.00
11,000.00	90.00	359.61	8,223.00	2,981.86	-20.06	2,981.93	0.00	0.00	0.00
11,100.00	90.00	359.61	8,223.00	3,081.86	-20.74	3,081.93	0.00	0.00	0.00
11,200.00	90.00	359.61	8,223.00	3,181.86	-21.41	3,181.93	0.00	0.00	0.00
11,300.00	90.00	359.61	8,223.00	3,281.86	-22.08	3,281.93	0.00	0.00	0.00
11,400.00	90.00	359.61	8,223.00	3,381.85	-22.76	3,381.93	0.00	0.00	0.00
11,500.00	90.00	359.61	8,223.00	3,481.85	-23.43	3,481.93	0.00	0.00	0.00
11,600.00	90.00	359.61	8,223.00	3,581.85	-24.10	3,581.93	0.00	0.00	0.00
11,700.00	90.00	359.61	8,223.00	3,681.85	-24.77	3,681.93	0.00	0.00	0.00
11,800.00	90.00	359.61	8,223.00	3,781.84	-25.45	3,781.93	0.00	0.00	0.00
11,900.00	90.00	359.61	8,223.00	3,881.84	-26.12	3,881.93	0.00	0.00	0.00
12,000.00	90.00	359.61	8,223.00	3,981.84	-26.79	3,981.93	0.00	0.00	0.00
12,100.00	90.00	359.61	8,223.00	4,081.84	-27.47	4,081.93	0.00	0.00	0.00
12,200.00	90.00	359.61	8,223.00	4,181.84	-28.14	4,181.93	0.00	0.00	0.00
12,300.00	90.00	359.61	8,223.00	4,281.83	-28.81	4,281.93	0.00	0.00	0.00
12,400.00	90.00	359.61	8,223.00	4,381.83	-29.48	4,381.93	0.00	0.00	0.00
12,500.00	90.00	359.61	8,223.00	4,481.83	-30.16	4,481.93	0.00	0.00	0.00
12,600.00	90.00	359.61	8,223.00	4,581.83	-30.83	4,581.93	0.00	0.00	0.00
12,700.00	90.00	359.61	8,223.00	4,681.82	-31.50	4,681.93	0.00	0.00	0.00
12,800.00	90.00	359.61	8,223.00	4,781.82	-32.18	4,781.93	0.00	0.00	0.00
12,900.00	90.00	359.61	8,223.00	4,881.82	-32.85	4,881.93	0.00	0.00	0.00
13,000.00	90.00	359.61	8,223.00	4,981.82	-33.52	4,981.93	0.00	0.00	0.00
13,071.19	90.00	359.61	8,223.00	5,053.01	-34.00	5,053.12	0.00	0.00	0.00

Design Targets									
Target Name	hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude Longitude
RB 32-23-30 1H- BHL	- plan hits target center	0.00	0.00	8,223.00	5,053.01	-34.00	461,594.00	672,160.00	32.268288 -103.910074
- Point									
RB 32-23-30 1H- SHL	- plan misses target center by 198.31ft at 8108.28ft MD (8074.38 TVD, 131.29 N, -0.88 E)	0.00	0.00	8,223.00	0.00	0.00	456,541.00	672,194.00	32.254397 -103.910028
- Point									

**Chesapeake Operating, Inc.'s Closed Loop System
PLU REMUDA BASIN 32 23 30 STATE 1H
Unit M, Sec. 32, T-23-S R-30-E
Eddy Co., NM
API # 30-015-**

Equipment & Design:

Chesapeake Operating, Inc. is to use a closed loop system with roll-off steel pits. Cactus Drilling Company (#120) has the following equipment for maintenance of their drilling mud:

Mud System:

- (2) Derrick FLC-503 Linear Motion Shale Shakers**
- (1) NOV 16-cone/ 4" desilter**
- (1) NOV 2 cone/ 10" desander**

Fresh and brine water tanks with the capacity to efficiently drill well

Operations & Maintenance:

During each tour, the rig's drilling crew will inspect and monitor the drilling fluids contained within the steel pits and visually monitor any spill which may occur. Should a spill, release, or leak occur; the NMOCD District II office in Artesia (575-748-1283) will be notified. Please note that notifications may be made earlier to the district office should a greater release occur per NMOCD's rules.

Closure:

During and after drilling operations, drilling fluids and cuttings will be hauled to Controlled Recovery, Inc. Permit # NM-01-0006.

The alternative disposal facility will be Sundance Disposal. Permit # NM-01-000