UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

N.M. Oil Cons. Div. 2
301 W. Grand Ave
Artesia, NM 882

SUBMIT IN TRIPLICATE* (See other instructions on reverse side)

Form approved.

CONFIDENTIAL – TIGHT HOLE

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

5.LEASE DESIGNATION AND SERIAL NO.	NMNM 26381
6.IF INDIAN, ALLOTTEE OR TRIBE NAME	
7.UNIT AGREEMENT NAME	PENDING
8.FARM OR LEASE NAME, WELL NO.	TISH 29 FEDERAL COM 1 (34973)
9.API WELL NO.	30-015-34233
10.FIELD AND POOL, OR WILDCAT	DUBLIN RANCH · Morrow (76140)
11.SEC.,T.,R.,M.,OR BLOCK AND SURVEY OR AREA	Sec 29 T22S R28E

TYPE OF WORK: DRILL ☒ DEEPEN ☐

TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ Other ___ SINGLE ZONE ☐ MULTIPLE ZONE ☐

2. NAME OF OPERATOR: CHESAPEAKE OPERATING, INC. Linda Good 147179

3. ADDRESS AND TELEPHONE NO.: P.O. BOX 18496 OKLAHOMA CITY, OK 73154-0496 405-767-4275

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*

At surface: 1090 FSL 990 FEL, SE SE

At BHLoc: 660 FSL 1980 FEL, SW SE

RECEIVED
JUL 25 2005
OCD-ARTESIA

SUBJECT TO LIKE APPROVAL BY STATE

14.DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*	12. COUNTY OR PARISH	13. STATE
8.8 Miles SE Carlsbad, NM	EDDY COUNTY	NM

15.DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line if any)	16.NO. OF ACRES IN LEASE	17.NO. OF ACRES ASSIGNED TO THIS WELL
	120	320
18.DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19.PROPOSED DEPTH**	**20.ROTARY OR CABLE TOOLS***
	12,700	ROTARY

21.ELEVATIONS (Show whether DF, RT, GR, etc.)	22. APPROX. DATE WORK WILL START*
3025 GR 3050 KB CARLSBAD CONTROLLED WATER BASIN	

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
"	"	#	'	+/-
"	"	#	'	+/-
	"	#	'	+/-

Chesapeake Operating, Inc. proposes to drill a well to 12,750 to test the Morrow 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.

Chesapeake has a surface agreement with the City of Carlsbad, 720 Park Drive, Carlsbad, NM 88220, Richard Aguilar (contact) 505-887-1191.

BLM Nationwide Bond No. NM2634.

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 once a rig is assigned.

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.

The location has changed from 660 FSL 1296 FEL to 1090 FSL 990 FEL.

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

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

24.

SIGNED _____ Henry Hood TITLE Sr. Vice President Land Legal DATE 6/1/05

*(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

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:

APPROVED BY /s/ Joe G. Lara TITLE ACTING FIELD MANAGER DATE JUL 21 2005

See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes 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

> 9.5 S.T

APPROVAL FOR 1 YEAR

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised JUNE 10, 2003
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT II
811 S. 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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
	76140	Dublin Ranch; Morrow

Property Code	Property Name	Well Number
	TISH 29 FEDERAL	1

OGRID No.	Operator Name	Elevation
	CHESAPEAKE OPERATING, INC.	3037'

Surface Location

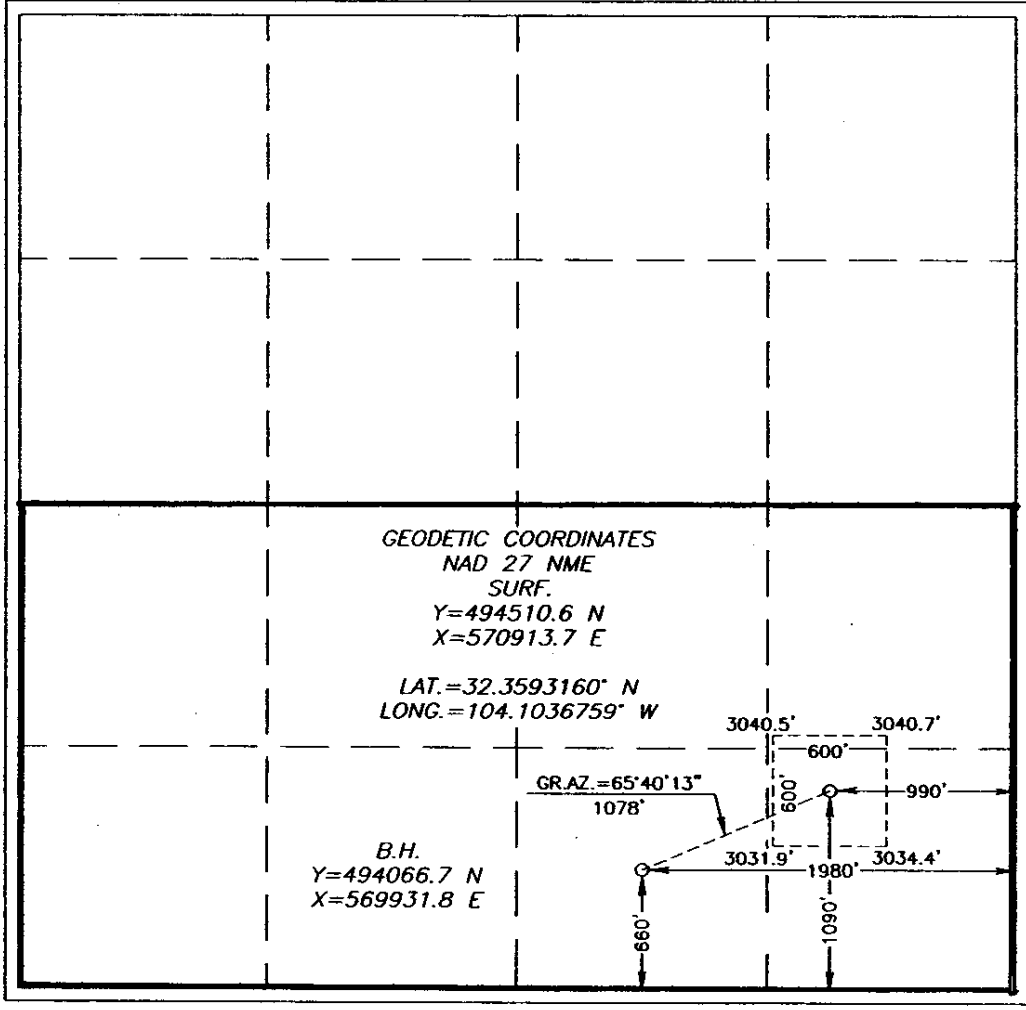
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	29	22-S	28-E		1090	SOUTH	990	EAST	EDDY

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
O	29	22-S	28-E		660	SOUTH	1980	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

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 the the information contained herein is true and complete to the best of my knowledge and belief.

Kathy F. Blick
Signature

Kathy F. Blick
Printed Name

Landman
Title

05-23-05
Date

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 supervison, and that the same is true and correct to the best of my belief.

MAY 18, 2005
Date Surveyed JR

Signature & Seal of Professional Surveyor

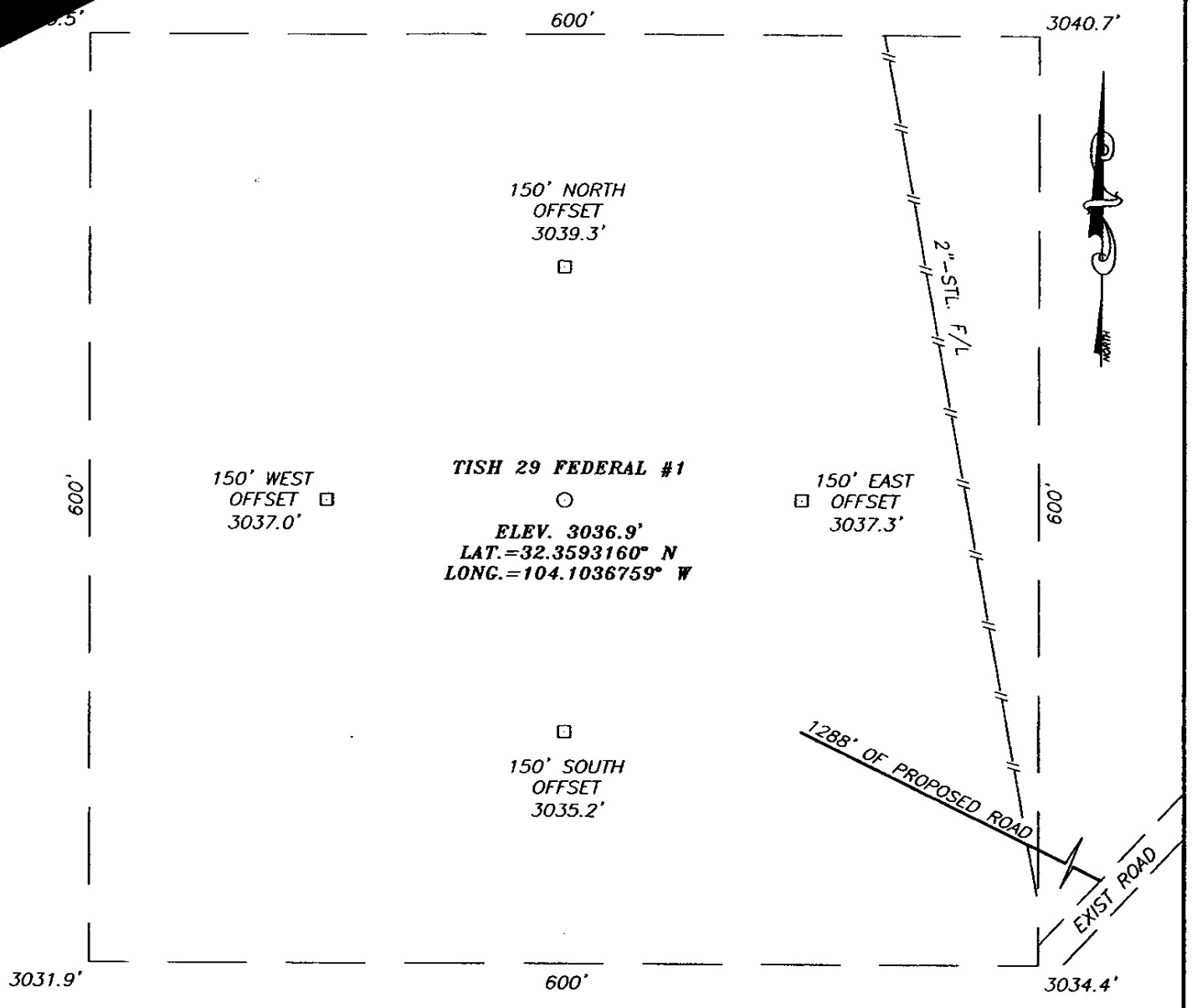
GARY G. EIDSON
NEW MEXICO
12641
REGISTERED PROFESSIONAL SURVEYOR
05.11.0778

Certificate No. GARY EIDSON 12641

Exhibit A-1

[redacted] TOWNSHIP 22 SOUTH, RANGE 28 EAST, N.M.P.M.,

[redacted] COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF ST. HWY. #31 AND CO. RD. #605 (U.S. REFINERY RD.) BEING 0.7 MILES SW OF MILE POST #6. GO NORTH/NW ALONG CO. RD. #605 FOR APPROX. 4.8 MILES TO A CALICHE ROAD ON THE LEFT. TURN LEFT (SOUTH/SW) AND GO APPROX. 0.1 MILES TO A "Y" INTERSECTION. TURN RIGHT AND FOLLOW ROAD FOR APPROX. 0.7 MILES TO A PROPOSED ROAD SURVEY ON THE RIGHT. FOLLOW PROPOSED ROAD SURVEY NW FOR APPROX. 1300' TO THIS LOCATION.

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

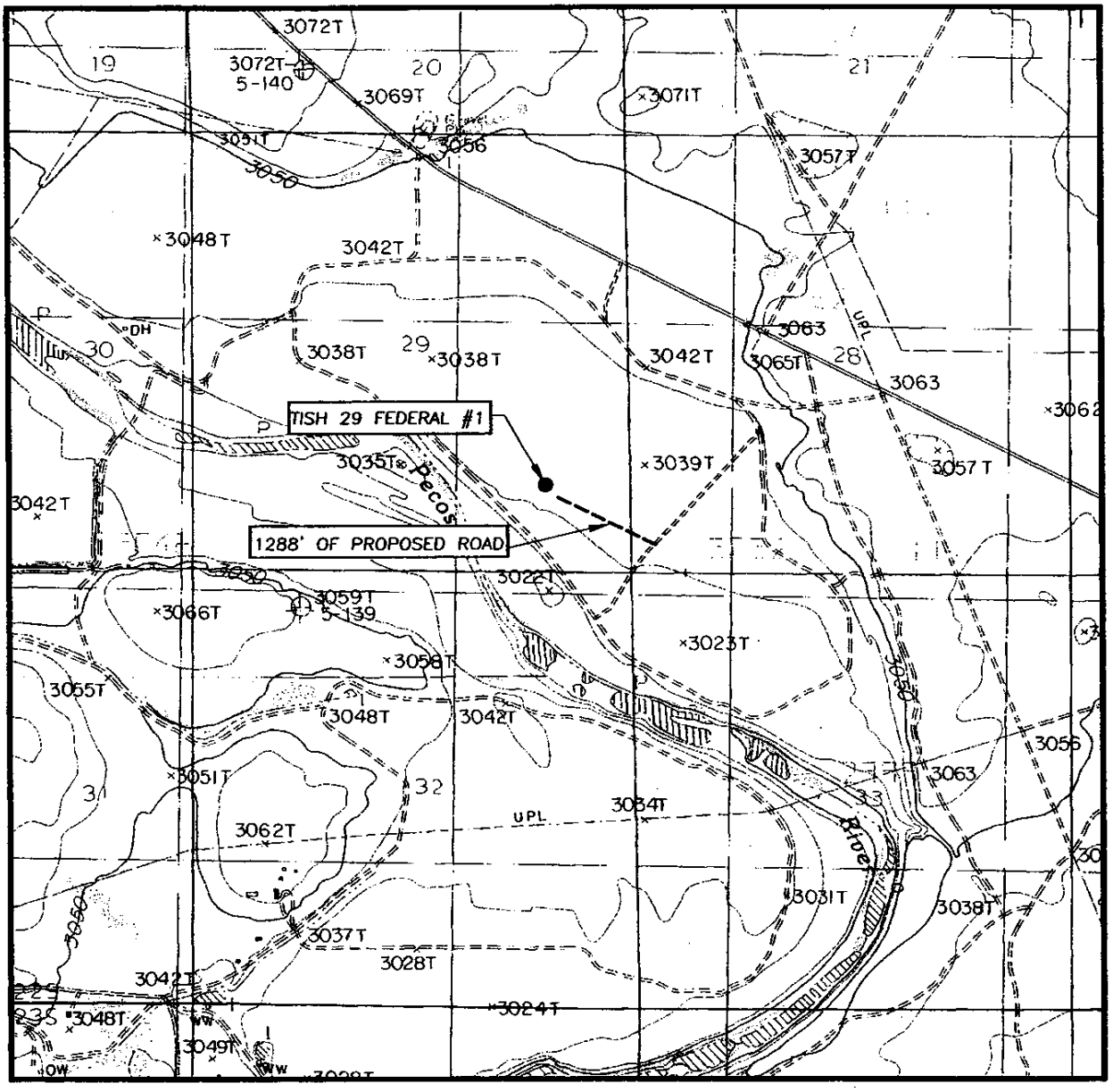
CHESAPEAKE OPERATING, INC.

TISH 29 FEDERAL #1 WELL
LOCATED 1090 FEET FROM THE SOUTH LINE
AND 990 FEET FROM THE EAST LINE OF SECTION 29,
TOWNSHIP 22 SOUTH, RANGE 28 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.

Survey Date: 05/18/05	Sheet 1 of 1 Sheets		
W.O. Number: 05.11.0770	Dr By: J.R.		Rev 1:N/A
Date: 05/19/05	Disk: CD#5	05110770	Scale: 1"=100'

Exhibit A-2

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
LOVING, N.M. – 10'

SEC. 29 TWP. 22-S RGE. 28-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1090' FSL & 990' FEL

ELEVATION 3037'

OPERATOR CHESAPEAKE OPERATING, INC.

LEASE TISH 29 FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
LOVING, N.M.

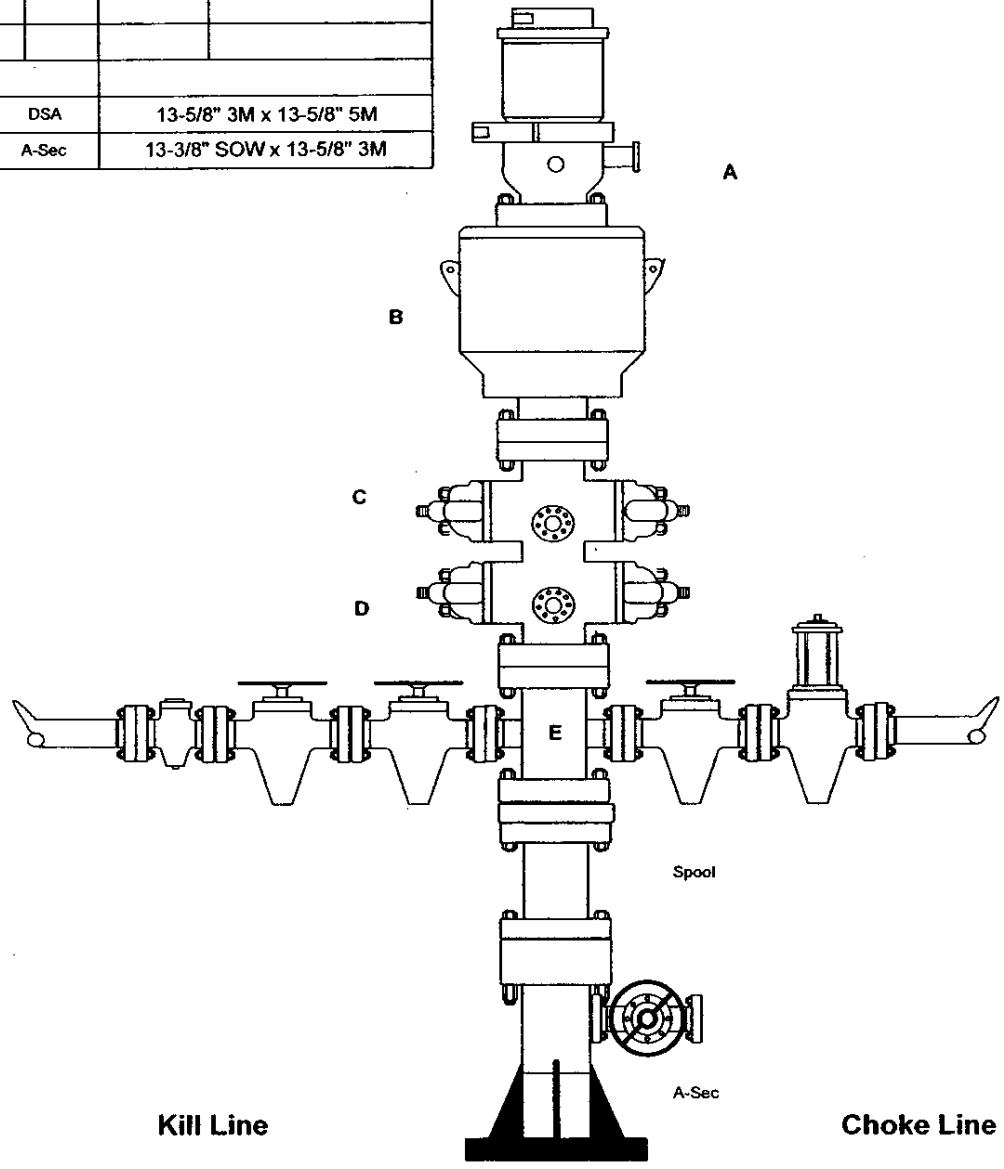
PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

Exhibit A-4

BLOWOUT PREVENTO. . SCHEMATIC
CHESAPEAKE OPERATING INC

WELL : **Tish 29 Federal #1**
RIG :
COUNTY : **Eddy** **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"	5,000#	Annular
C	13-5/8"	5,000#	Pipe Rams
D	13-5/8"	5,000#	Blind Rams
E	13-5/8"	5,000#	Mud Cross
DSA	13-5/8" 3M x 13-5/8" 5M		
A-Sec	13-3/8" SOW x 13-5/8" 3M		



Kill Line

SIZE	PRESSURE	DESCRIPTION
2"	5,000#	Check Valve
2"	5,000#	Gate Valve
2"	5,000#	Gate Valve

Choke Line

SIZE	PRESSURE	DESCRIPTION
4"	5,000#	Gate Valve
4"	5,000#	HCR Valve

Exhibit F-1

BLOWOUT PREVENTO' SCHEMATIC
CHESAPEAKE OPERA TING INC

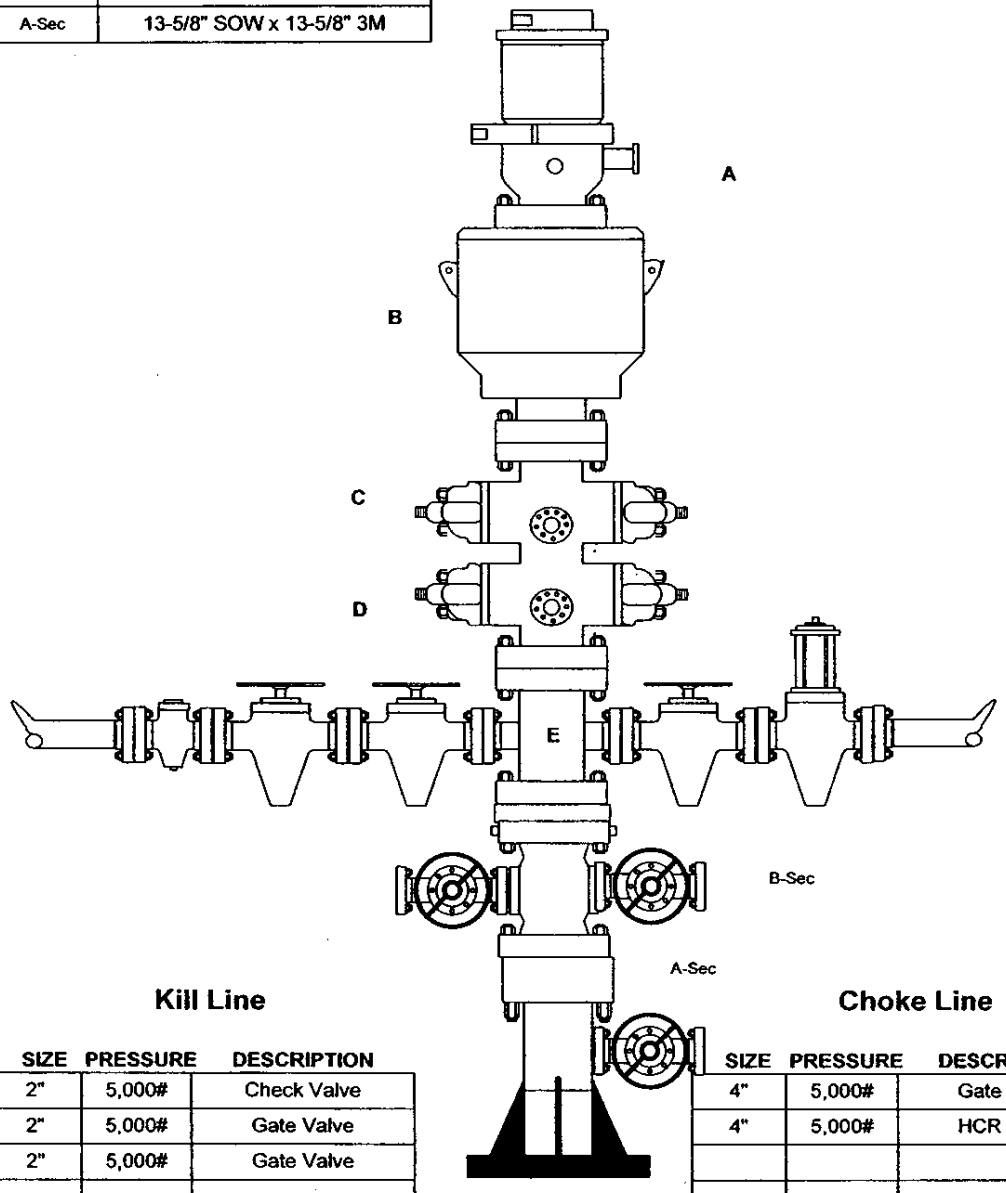
WELL : **Tish 29 Federal #1**

RIG :

COUNTY : **Eddy** **STATE: New Mexico**

OPERATION: Drill out below 9-5/8" Casing

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



Kill Line

SIZE	PRESSURE	DESCRIPTION
2"	5,000#	Check Valve
2"	5,000#	Gate Valve
2"	5,000#	Gate Valve

Choke Line

SIZE	PRESSURE	DESCRIPTION
4"	5,000#	Gate Valve
4"	5,000#	HCR Valve

Exhibit F-2

BLOWOUT PREVENTOR SCHEMATIC

CHESAPEAKE OPERA NG INC

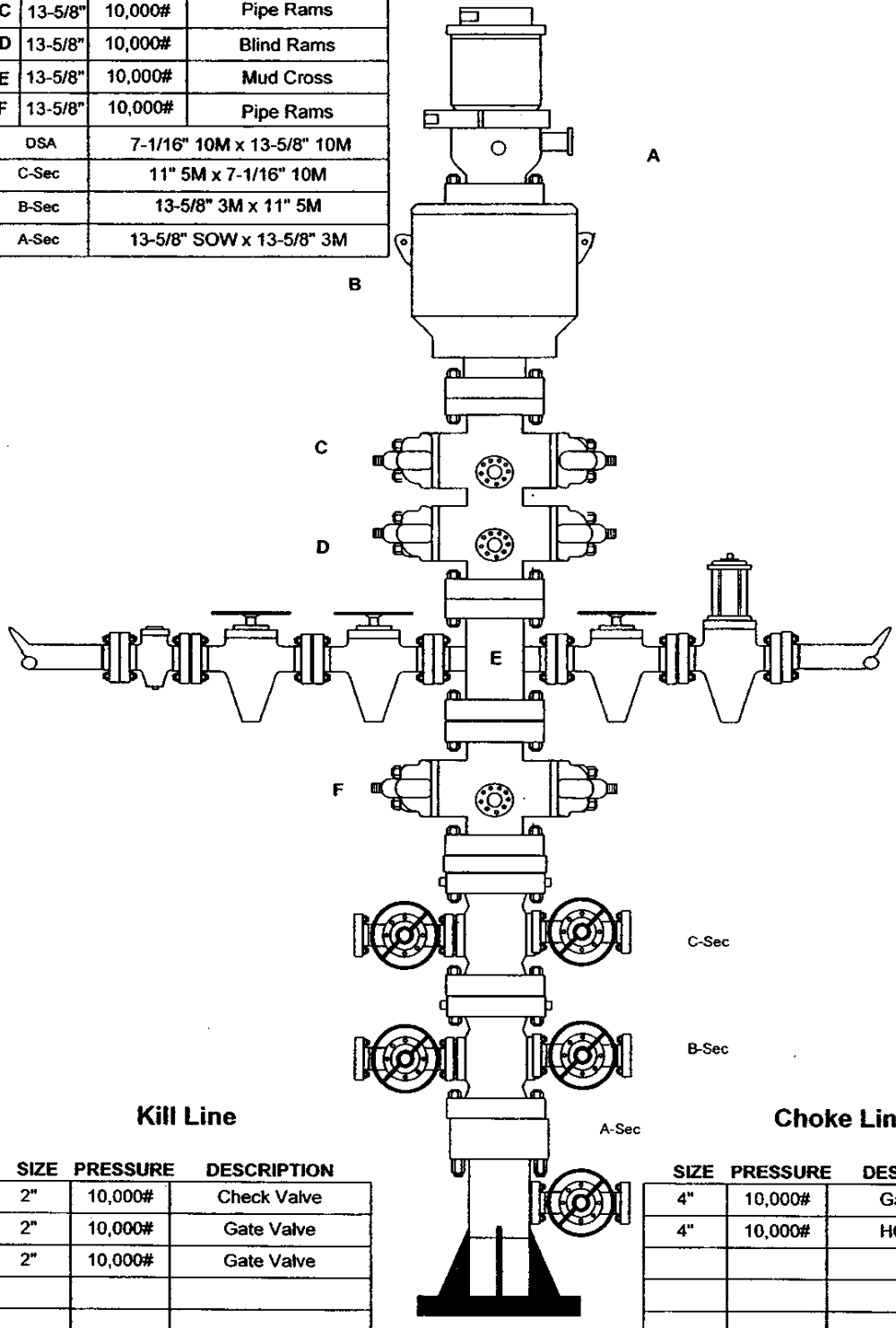
WELL : **Tish 29 Federal #1**

RIG :

COUNTY : **Eddy** **STATE: New Mexico**

OPERATION: Drill out below 7" Casing

	SIZE	PRESSURE	DESCRIPTION
A	13-5/8"	500#	Rot Head
B	13-5/8"	5,000#	Annular
C	13-5/8"	10,000#	Pipe Rams
D	13-5/8"	10,000#	Blind Rams
E	13-5/8"	10,000#	Mud Cross
F	13-5/8"	10,000#	Pipe Rams
DSA		7-1/16" 10M x 13-5/8" 10M	
C-Sec		11" 5M x 7-1/16" 10M	
B-Sec		13-5/8" 3M x 11" 5M	
A-Sec		13-5/8" SOW x 13-5/8" 3M	



Kill Line

SIZE	PRESSURE	DESCRIPTION
2"	10,000#	Check Valve
2"	10,000#	Gate Valve
2"	10,000#	Gate Valve

Choke Line

SIZE	PRESSURE	DESCRIPTION
4"	10,000#	Gate Valve
4"	10,000#	HCR Valve

Exhibit F-3

peake Energy,T 29 Federal #1
Eddy County,,Eddy County
Sec 29 - 22S - 28E,New Mexico

PRO SAL
Wellbore: Tish 29 Federal #1 (PWB)
Wellpath: Tish 29 Federal #1 (PWP#1)
Date Printed: 31-May-2005

DrillRight TECHNOLOGY, INC.
9630 Pole Rd.
Oklahoma City, OK 73160
Tel: (405) 604-2969

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]
5000.00	0.00	247.01	5000.00	0.00N	0.00E	0.00	0.00
5100.00	2.00	247.01	5099.98	0.68S	1.61W	2.00	1.75
5200.00	4.00	247.01	5199.84	2.73S	6.42W	2.00	6.98
5300.00	6.00	247.01	5299.45	6.13S	14.45W	2.00	15.69
5400.00	8.00	247.01	5398.70	10.89S	25.67W	2.00	27.88
5500.00	10.00	247.01	5497.47	17.00S	40.07W	2.00	43.52
5600.00	12.00	247.01	5595.62	24.45S	57.63W	2.00	62.60
5621.92	12.44	247.01	5617.05	26.26S	61.90W	2.00	67.24
5700.00	12.44	247.01	5693.29	32.83S	77.38W	0.00	84.06
5800.00	12.44	247.01	5790.95	41.24S	97.21W	0.00	105.60
5900.00	12.44	247.01	5888.60	49.65S	117.04W	0.00	127.14
6000.00	12.44	247.01	5986.25	58.07S	136.87W	0.00	148.68
6100.00	12.44	247.01	6083.90	66.48S	156.70W	0.00	170.22
6200.00	12.44	247.01	6181.56	74.89S	176.53W	0.00	191.76
6300.00	12.44	247.01	6279.21	83.30S	196.35W	0.00	213.29
6400.00	12.44	247.01	6376.86	91.71S	216.18W	0.00	234.83
6500.00	12.44	247.01	6474.52	100.13S	236.01W	0.00	256.37
6600.00	12.44	247.01	6572.17	108.54S	255.84W	0.00	277.91
6700.00	12.44	247.01	6669.82	116.95S	275.67W	0.00	299.45
6800.00	12.44	247.01	6767.47	125.36S	295.50W	0.00	320.99
6900.00	12.44	247.01	6865.13	133.78S	315.33W	0.00	342.53
7000.00	12.44	247.01	6962.78	142.19S	335.15W	0.00	364.07
7100.00	12.44	247.01	7060.43	150.60S	354.98W	0.00	385.61
7200.00	12.44	247.01	7158.09	159.01S	374.81W	0.00	407.15
7300.00	12.44	247.01	7255.74	167.42S	394.64W	0.00	428.69
7400.00	12.44	247.01	7353.39	175.84S	414.47W	0.00	450.22
7500.00	12.44	247.01	7451.04	184.25S	434.30W	0.00	471.76
7600.00	12.44	247.01	7548.70	192.66S	454.13W	0.00	493.30
7700.00	12.44	247.01	7646.35	201.07S	473.95W	0.00	514.84
7800.00	12.44	247.01	7744.00	209.48S	493.78W	0.00	536.38
7900.00	12.44	247.01	7841.65	217.90S	513.61W	0.00	557.92
8000.00	12.44	247.01	7939.31	226.31S	533.44W	0.00	579.46
8100.00	12.44	247.01	8036.96	234.72S	553.27W	0.00	601.00
8200.00	12.44	247.01	8134.61	243.13S	573.10W	0.00	622.54
8300.00	12.44	247.01	8232.27	251.54S	592.92W	0.00	644.08
8400.00	12.44	247.01	8329.92	259.96S	612.75W	0.00	665.62
8500.00	12.44	247.01	8427.57	268.37S	632.58W	0.00	687.15
8600.00	12.44	247.01	8525.23	276.78S	652.41W	0.00	708.69

All data is in Feet unless otherwise stated
Coordinates are from Installation MD's are from Rig and TVD's are from Rig (Datum #1 0.00ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 247.01 degrees
Bottom hole distance is 1075.41 Feet on azimuth 247.01 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Drill Right

Exhibit 6

peake Energy,T. 29 Federal #1
Eddy County,,Eddy County
Sec 29 - 22S - 28E,New Mexico

PRO SAL
Wellbore: Tish 29 Federal #1 (PWB)
Wellpath: Tish 29 Federal #1 (PWP#1)
Date Printed: 31-May-2005

DrillRight
9630 Pole Rd.
Oklahoma City, OK 73160
Tel: (405) 604-2969

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]
8700.00	12.44	247.01	8622.88	285.19S	672.24W	0.00	730.23
8800.00	12.44	247.01	8720.53	293.60S	692.07W	0.00	751.77
8900.00	12.44	247.01	8818.18	302.02S	711.90W	0.00	773.31
9000.00	12.44	247.01	8915.84	310.43S	731.72W	0.00	794.85
9100.00	12.44	247.01	9013.49	318.84S	751.55W	0.00	816.39
9200.00	12.44	247.01	9111.14	327.25S	771.38W	0.00	837.93
9300.00	12.44	247.01	9208.79	335.67S	791.21W	0.00	859.47
9400.00	12.44	247.01	9306.45	344.08S	811.04W	0.00	881.01
9500.00	12.44	247.01	9404.10	352.49S	830.87W	0.00	902.55
9600.00	12.44	247.01	9501.75	360.90S	850.70W	0.00	924.08
9700.00	12.44	247.01	9599.41	369.31S	870.52W	0.00	945.62
9800.00	12.44	247.01	9697.06	377.73S	890.35W	0.00	967.16
9900.00	12.44	247.01	9794.71	386.14S	910.18W	0.00	988.70
9990.36	12.44	247.01	9882.95	393.74S	928.10W	0.00	1008.16
10090.36	10.44	247.01	9980.96	401.48S	946.35W	2.00	1027.99
10190.36	8.44	247.01	10079.60	407.89S	961.45W	2.00	1044.39
10290.36	6.44	247.01	10178.75	412.94S	973.37W	2.00	1057.34
10390.36	4.44	247.01	10278.30	416.64S	982.09W	2.00	1066.82
10490.36	2.44	247.01	10378.11	418.99S	987.61W	2.00	1072.81
10590.36	0.44	247.01	10478.08	419.97S	989.92W	2.00	1075.32
10612.28	0.00	247.01	10500.00	420.00S	990.00W	2.00	1075.41
10700.00	0.00	247.01	10587.72	420.00S	990.00W	0.00	1075.41
10800.00	0.00	247.01	10687.72	420.00S	990.00W	0.00	1075.41
10900.00	0.00	247.01	10787.72	420.00S	990.00W	0.00	1075.41
11000.00	0.00	247.01	10887.72	420.00S	990.00W	0.00	1075.41
11100.00	0.00	247.01	10987.72	420.00S	990.00W	0.00	1075.41
11200.00	0.00	247.01	11087.72	420.00S	990.00W	0.00	1075.41
11300.00	0.00	247.01	11187.72	420.00S	990.00W	0.00	1075.41
11400.00	0.00	247.01	11287.72	420.00S	990.00W	0.00	1075.41
11500.00	0.00	247.01	11387.72	420.00S	990.00W	0.00	1075.41
11600.00	0.00	247.01	11487.72	420.00S	990.00W	0.00	1075.41
11700.00	0.00	247.01	11587.72	420.00S	990.00W	0.00	1075.41
11800.00	0.00	247.01	11687.72	420.00S	990.00W	0.00	1075.41
11900.00	0.00	247.01	11787.72	420.00S	990.00W	0.00	1075.41
12000.00	0.00	247.01	11887.72	420.00S	990.00W	0.00	1075.41
12100.00	0.00	247.01	11987.72	420.00S	990.00W	0.00	1075.41
12200.00	0.00	247.01	12087.72	420.00S	990.00W	0.00	1075.41
12300.00	0.00	247.01	12187.72	420.00S	990.00W	0.00	1075.41

All data is in Feet unless otherwise stated
Coordinates are from Installation MD's are from Rig and TVD's are from Rig (Datum #1 0.00ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 247.01 degrees
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peake Energy,T 29 Federal #1
Eddy County,,Eddy County
Sec 29 - 22S - 28E,New Mexico

PRO SAL
Wellbore: Tish 29 Federal #1 (PWB)
Wellpath: Tish 29 Federal #1 (PWP#1)
Date Printed: 31-May-2005

DrillRight
9630 Pole Rd.
Oklahoma City, OK 73160
Tel: (405) 684-2949

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]
12400.00	0.00	247.01	12287.72	420.00S	990.00W	0.00	1075.41
12500.00	0.00	247.01	12387.72	420.00S	990.00W	0.00	1075.41
12600.00	0.00	247.01	12487.72	420.00S	990.00W	0.00	1075.41
12700.00	0.00	247.01	12587.72	420.00S	990.00W	0.00	1075.41
12800.00	0.00	247.01	12687.72	420.00S	990.00W	0.00	1075.41
12812.28	0.00	236.29	12700.00	420.00S	990.00W	0.00	1075.41

All data is in Feet unless otherwise stated
Coordinates are from Installation MD's are from Rig and TVD's are from Rig (Datum #1 0.00ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 247.01 degrees
Bottom hole distance is 1075.41 Feet on azimuth 247.01 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Drill Right

Chesapeake Energy

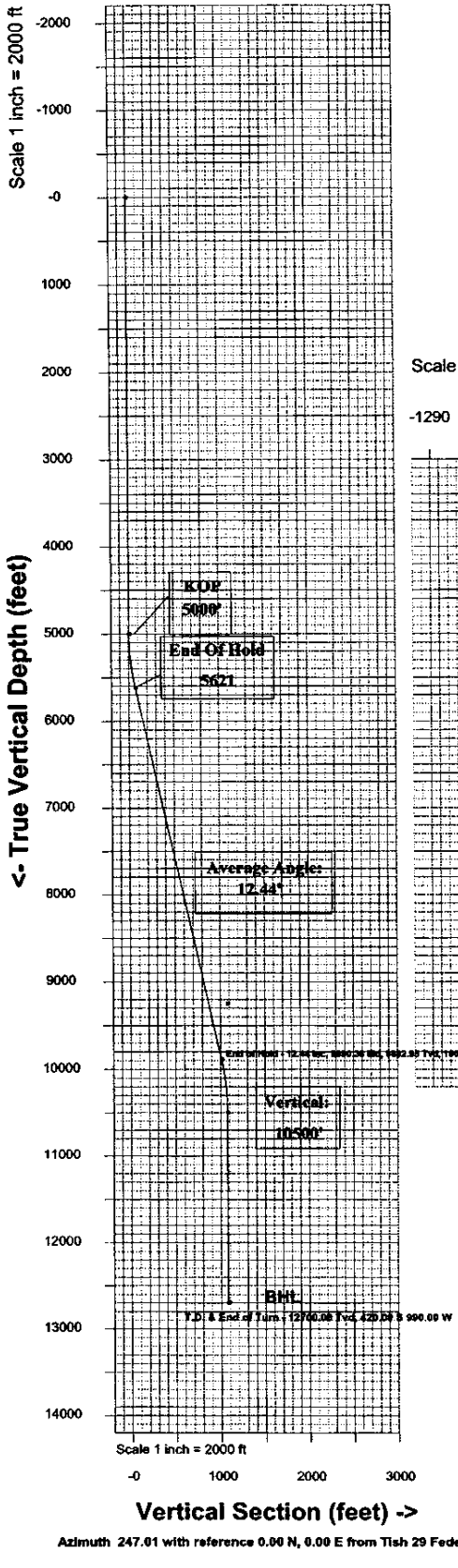
Location: New Mexico Installation: Eddy County,

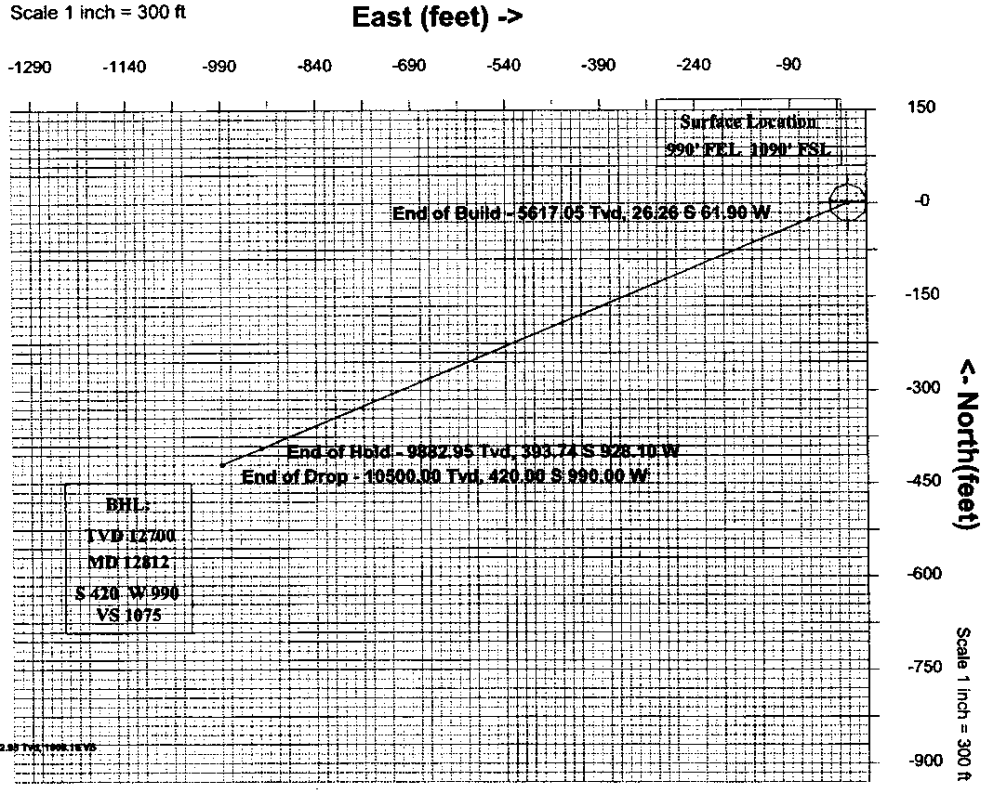
Field: Sec 29 - 22S - 28E Well: Tish 29 Federal #1

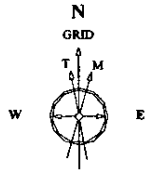
DrillRight TECHNOLOGY, INC.
9630 Pole Rd.
Oklahoma City, OK 73160
Tel: (405) 604-2969

WELL PROFILE DATA

Point	MD	Inc	Azi	TVD	North	East	deg/100ft	V. Sect
Tie on	0.00	0.00	247.01	0.00	0.00	0.00	0.00	0.00
KOP	5000.00	0.00	247.01	5000.00	0.00	0.00	0.00	0.00
End of Build	5621.92	12.44	247.01	5617.05	-26.26	-61.90	2.00	67.24
End of Hold	9990.36	12.44	247.01	9882.95	-393.74	-928.10	0.00	1008.16
Target Target	10612.28	0.00	247.01	10500.00	-420.00	-990.00	2.00	1075.41
T.D. & Target BHL	12812.28	0.00	236.29	12700.00	-420.00	-990.00	0.00	1075.41







26-May-2005
IGRF Model [1900.0-2005.5] Dip: 60.46 deg Field: 49434.4 nT
Magnetic North is 8.80 degrees East of True North
GRID North is 0.12 degrees East of True North
To correct azimuth from True to GRID subtract 0.12 deg
To correct azimuth from Magnetic to GRID add 8.67 deg

Created by : admin
Date plotted : 31-May-2005
Plot reference is Tish 29 Federal #1 (PWB).
Ref wellpath is Tish 29 Federal #1 (PWP#1).
Coordinates are in feet reference Tish 29 Federal #1.
True Vertical Depths are reference Rig Datum.
Measured Depths are reference Rig Datum.
Rig Datum: Datum #1
Rig Datum to Mean Sea Level: 0.00 ft.
Plot North is aligned to GRID North.

SURFACE OWNER:
City of Carlsbad

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.

13. OPERATOR'S REPRESENTATIVES

Drilling and Completion Operations
Rob Jones
District Manager
P.O. Box 18496
Oklahoma City, OK 73154
(405) 810-2694 (OFFICE)
(405) 879-9573 (FAX)
rjones@chkenergy.com

Drilling Engineer
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(405) 879-9573 (FAX)
(405) 990-8182 (MOBILE)
ddelao@chkenergy.com

Cecil Gutierrez
Sr. Landman
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432-687-2992 (OFFICE)
432-687-3675 (FAX)
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Assett Manager
Andrew McCalmont
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Oklahoma City, OK 73154-0496
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405-879-7930 (FAX)
amccalmont@chkenergy.com

Regulatory Compliance
Linda Good
Regulatory Compliance Analyst
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(405) 879-9583 (FAX)
lgood@chkenergy.com

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	Subsea	Depth
Delaware	635	2415
Bell Canyon Sand	570	2480 Oil
Cherry Canyon Sand	-800	3850 Oil
Brushy Canyon Basal Sand	-2750	5800 Oil
Bone Spring Lime	-2850	5900 Oil
First Bone Spring	-3900	6950
Second Bone Spring	-4720	7770
Third Bone Spring	-5925	8975
Wolfcamp	-6250	9300
Lower Wolfcamp Pay	-7060	10110 Gas
Base Wolfcamp Pay	-7290	10340
Cisco	-7490	10540
Canyon	-7650	10700
Upper Strawn	-7820	10870
Lower Strawn	-7980	11030
Lower Strawn Pay	-8050	11100 Gas
Atoka	-8220	11270
Atoka Sand Pay	-8270	11320 Gas
Atoka Datum Lime	-8340	11390
Morrow Upper Sand	-8725	11775
Morrow Clastic	-8910	11960
Morrow B Sand	-8960	12010 Gas
Morrow Carrasco Sand	-9050	12100 Gas
Lower Morrow	-9220	12270
Basal Lower Morrow Sand	-9390	12440 Gas-Primary
Total Depth	**-9650**	**12750**

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	Morrow B Sand	12010-12030
Oil/Gas	Basal Lower Morrow	12440-460

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

3. BOP EQUIPMENT: 5,000# (intermediate) and 10,000# (production) System

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

I. BOP, Annular, Choke Manifold, Pressure Test - See Exhibit F-1 and F-2.

A. Equipment
1. The equipment to be tested includes all of the following that is installed on the well:
(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:
3.

System Operating Pressures	Precharge Pressure
1500 PSI	750 PSI
2000 PSI	1,000 PSI
3000 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
WITNESS Surface	0-450	17-1/2	13-3/8	48	H48	STC	New
Intermediate	0-2,420'	12-1/4	9-5/8	36	J55	STC	New
Intermediate	0'-9,350'	8-3/4	7	26	P110	LTC	New
Prod uction	0'-12,700'	6-1/8	4-1/2	15.1	P110	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
WITNESS 0'-450'	Class C + Additives	570	1.34	25	50
0'- 2,420'	Class C 50/50 Poz + Additives	500+200	2.23/1.34	30	50
1,000' – 9,350'	Class H + Additives	630+100	2.38/1.22	10	30
8,500'-12,700'	Class H + additives	450	1.22	10	30

MUD PROGRAM

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

Interval	Mud Type	Mud Weight	Viscosity	Fluid Loss
0-450'	FW	8.7	29-38	NC
450'-2,420'	Brine	10	29	NC
2,420'-9,350'	FW/Brine	8.5 – 9.5	29-32	NC
9,350'-12,700'	Brine/XCD	10-11.8	38-45	8-12

An in-ground, lined pit will be utilized during the drilling of this well. All fluids and cuttings will be disposed of in accordance with New Mexico Oil Conservation Division rules and regulations.

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 Natural GR, Density-Neutron, PE & Dual Laterolog from TD to surface casing; Neutron-GR surface casing to surface.
c. Cores samples are not planned.

7. ABNORMAL PRESSURES AND HYDROGEN SULFIDE

a. The estimated bottom hole pressure is 5200 psi. No abnormal pressures or temperatures are anticipated.
b. Hydrogen sulfide gas is not anticipated.

OCD-ARTESIA

Form 3160-5
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE- Other instructions on reverse side.

1. Type of Well: ☐ Oil Well ☑ Gas Well ☐ Other
2. Name of Operator: **CHESAPEAKE OPERATING, INC.** — **LINDA GOOD (405-767-4275)**
3a. Address: **P.O. BOX 18496, OKLAHOMA CITY, OK 73154-0496**
3b. Phone No. *(include area code)*: **405-848-8000**
4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*: **1090 FSL 990 FEL SE SE SEC 29-22S-28E**
5. Lease Serial No.: **NMNM 26381**
6. If Indian, Allottee or Tribe Name:
7. If Unit or CA/Agreement, Name and/or No.: **PENDING**
8. Well Name and No.: **TISH 29 FEDERAL COM 1**
9. API Well No.:
10. Field and Pool, or Exploratory Area: **DUBLIN RANCH**
11. County or Parish, State: **EDDY COUNTY, NEW MEXICO**

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☑ Other **CHANGE TO ORIGINAL APD**
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Chesapeake is amending the original APD to change from an In-ground lined pit to a Closed Loop System with a cutting pit (150' X 100' X 30' Deep).

Chesapeake is bonded under BLM Nationwide Bond #NM2634.

Attached is the new rig plat.

(CHK PN 819550)

14. I hereby certify that the foregoing is true and correct
Name *(Printed/Typed)*: **LINDA GOOD** Title **PERMITTING AGENT 1**

Signature: Linda Good Date: 7/1/05

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by: /s/ Joe G. Lara ACTING Title: FIELD MANAGER Date: JUL 21 2005

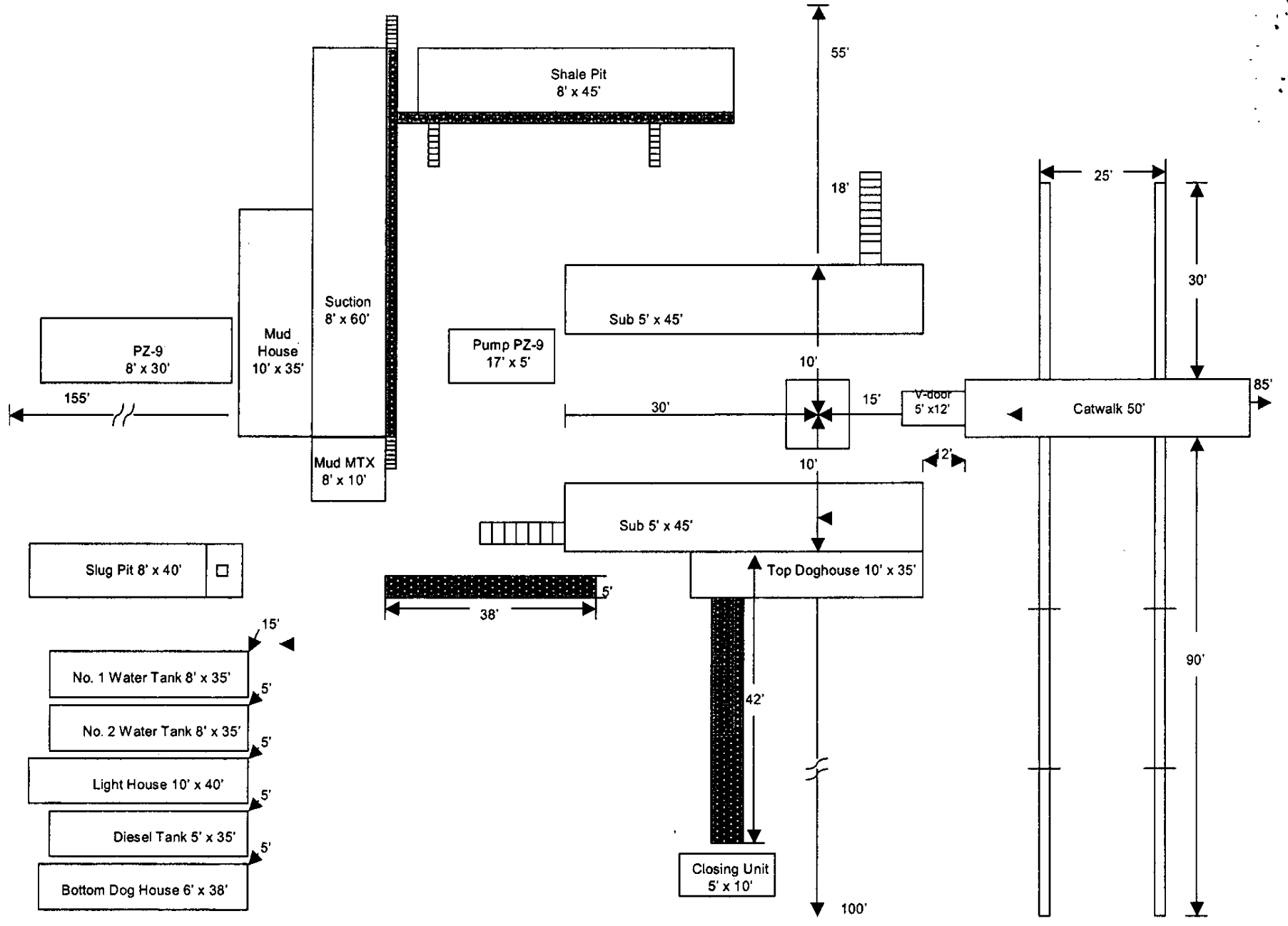
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office: CARLSBAD FIELD OFFICE

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)

McVay Drilling Rig No. 4



CONDITIONS OF APPROVAL - DRILLING

Operator's Name:	**CHESAPEAKE OPERATING, INC.**
Well Name & No.	**1 – TISH 29 FEDERAL COM**
Location:	**1090' FSL & 990' FEL – SEC 29 – T22S – R28E – EDDY COUNTY (SHL)**
	660' FSL & 1980' FEL – SEC 29 – T22S – R28E – EDDY COUNTY (BHL)
Lease:	**NM-26381**

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 **9-5/8** inch **7** inch **4-1/2** inch

C. BOP tests

2. No H2S (Hydrogen Sulfide) gas has been reported in the area.

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.

6. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.

II. CASING:

1. The **13-3/8** inch surface casing shall be set at **450 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.

2. The minimum required fill of cement behind the **9-5/8** inch 1st intermediate casing is **circulate cement to the surface.**

3. The minimum required fill of cement behind the **7** inch 2nd intermediate casing is **tie back 200 feet into the 9-5/8 inch intermediate casing.**

4. The minimum required fill of cement behind the **4-1/2** inch production casing is **cement shall extend upward a minimum of 500 feet above the uppermost hydrocarbon bearing interval.**

ORIG. SGD.) LES BABYAK

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** inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

2. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling the surface and 1st intermediate casing shall be **2000** psi. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling below the 1st intermediate casing shall be **3000** psi. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling below the 2nd intermediate casing to a depth of 12,700 feet shall be **5000** 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.