

1625 N. French Drive  
Hobbs, NM 88240

Form 3160-3  
(July 1992)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE\*  
(Other instructions on  
reverse side)

FORM APPROVED  
OMB NO. 1004-0136  
Expires: February 28, 1995

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK DRILL <input type="checkbox"/> DEEPEN <input checked="" type="checkbox"/>			5. LEASE DESIGNATION AND SERIAL NO. NM-2379	
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>			6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
2. NAME OF OPERATOR Pogo Producing Company			7. UNIT AGREEMENT NAME	
3. ADDRESS AND TELEPHONE NO. P. O. Box 10340, Midland, TX 79702-7340 (915)685-8100			8. FARM OR LEASE NAME, WELL NO. Covington A Federal #1	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 660' FNL & 1980' FWL At proposed prod. zone 660' FNL & 660' FWL			9. API WELL NO. 30-025-24947	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*			10. FIELD AND POOL, OR WILDCAT Red Tank Morrow East	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT (Also to nearest drg. unit line, if any) 660'			11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Section 25, T22S, R32E	
16. NO. OF ACRES IN LEASE 1280			12. COUNTY OR PARISH Lea County	
17. NO. OF ACRES ASSIGNED TO THIS WELL 320			13. STATE NM	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. NA			20. ROTARY OR CABLE TOOLS Rotary	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3764' GR			22. APPROX. DATE WORK WILL START*	

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
6-1/8"	5" P110	18#	15,662	400 sks CI "H"

Pogo Producing Company respectfully ask permission to drill a directional hole to the Morrow in the Covington "A" Federal #1 to 15,662' MD & a BHL of 660' FNL & 660' FWL, Section 25, T22S, R32E.

A casing inspection log will be run initially & if it indicates the 7" wall loss is minimal, directional operations will begin. Pogo will do this by cement squeezing the Bone Springs zones 8859'-83' & 9976'-82', drill out necessary cement plugs, set a whip stock & cut a window in the 7" casing at ±10,438'. A 6-1/8" hole will be drilled to the above BHL, after which a 5" liner will be cemented in place. Pogo will then perf, stimulate & complete in the Morrow.

OPER. OGRID NO. 17891  
PROPERTY NO. 9316  
POOL CODE 83730  
EFF. DATE 7/5/01  
API NO. 30-025-24947

IN ABOVE SPACE DESCRIBE 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 Danall TITLE Division Operations Engineer DATE 04/17/01

(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 (ORIG. SGD.) ALEXIS C. SWOBODA TITLE PETROLEUM ENGINEER DATE APR 19 2001

\*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.

SCA

RECEIVED  
APR 19 2001  
BLM  
ROSWELL, NM

RECEIVED  
APR 19 2001  
BLM  
ROSWELL, NM

District I  
PO Box 1980, Hobbs, NM 88241-1980

District II  
811 South First, Artesia, NM 88210

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

District IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

Form C-102  
Revised October 18, 1994  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-025-24947	<sup>2</sup> Pool Code 83730	<sup>3</sup> Pool Name Red Tank Morrow East
<sup>4</sup> Property Code 9316	<sup>5</sup> Property Name Covington "A" Federal	<sup>6</sup> Well Number 1
<sup>7</sup> OGRID No. 017891	<sup>8</sup> Operator Name Pogo Producing Company	<sup>9</sup> Elevation 3764' GR

<sup>10</sup>Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West Line	County
C	25	22	32		660	North	1980	West	Lea

<sup>11</sup>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	25	22	32		660	North	660	West	Lea
<sup>12</sup> Dedicated Acres 320	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> 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

<sup>16</sup>	<sup>17</sup> OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief  Signature <u>Cathy Tomberlin</u> Printed Name <u>Cathy Tomberlin</u> Title <u>Operation Tech</u> Date <u>April 17, 2001</u>
	<sup>18</sup> 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.  Date of Survey _____ Signature and Seal of Professional Surveyer: _____  Certificate Number _____

POGO PRODUCING COMPANY  
Covington "A" Federal #1  
660' FNL & 1980' FWL, Sec. 25  
T22S, R32E, Lea County, NM

Drill 6-1/8" hole to 15,662' (MD). Run and set a 5" 18# P-110 LT&C liner from 15,662' (MD) to 10,238' (TVD) (200' overlap). Cement liner with 400 sxs of premium cement. Cement top to be above 10,238' TVD.

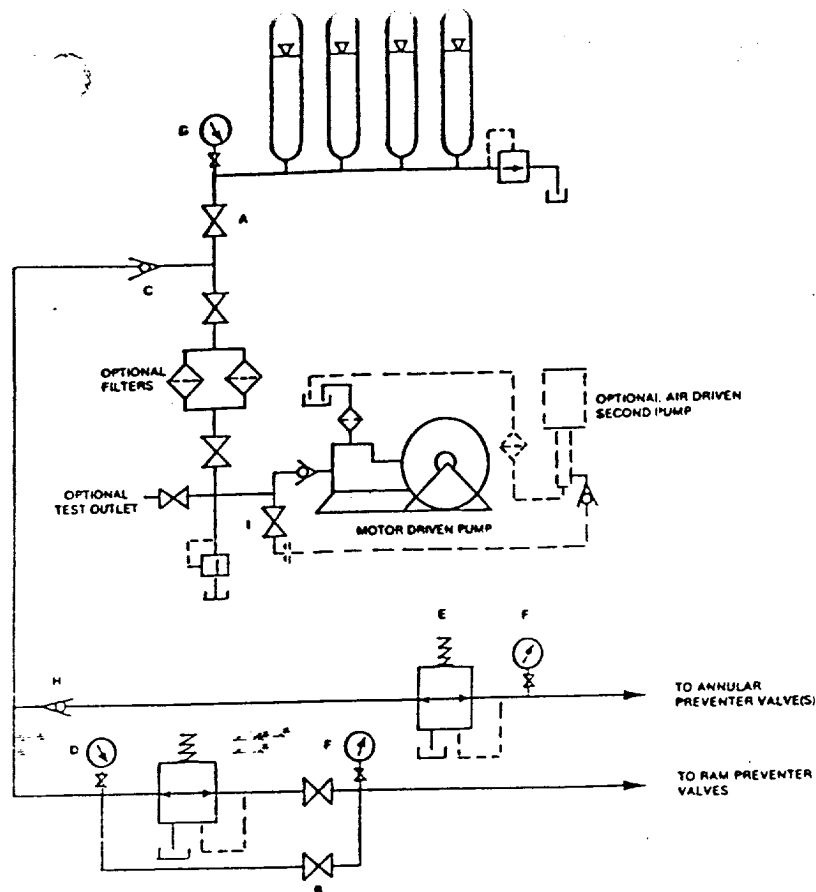


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

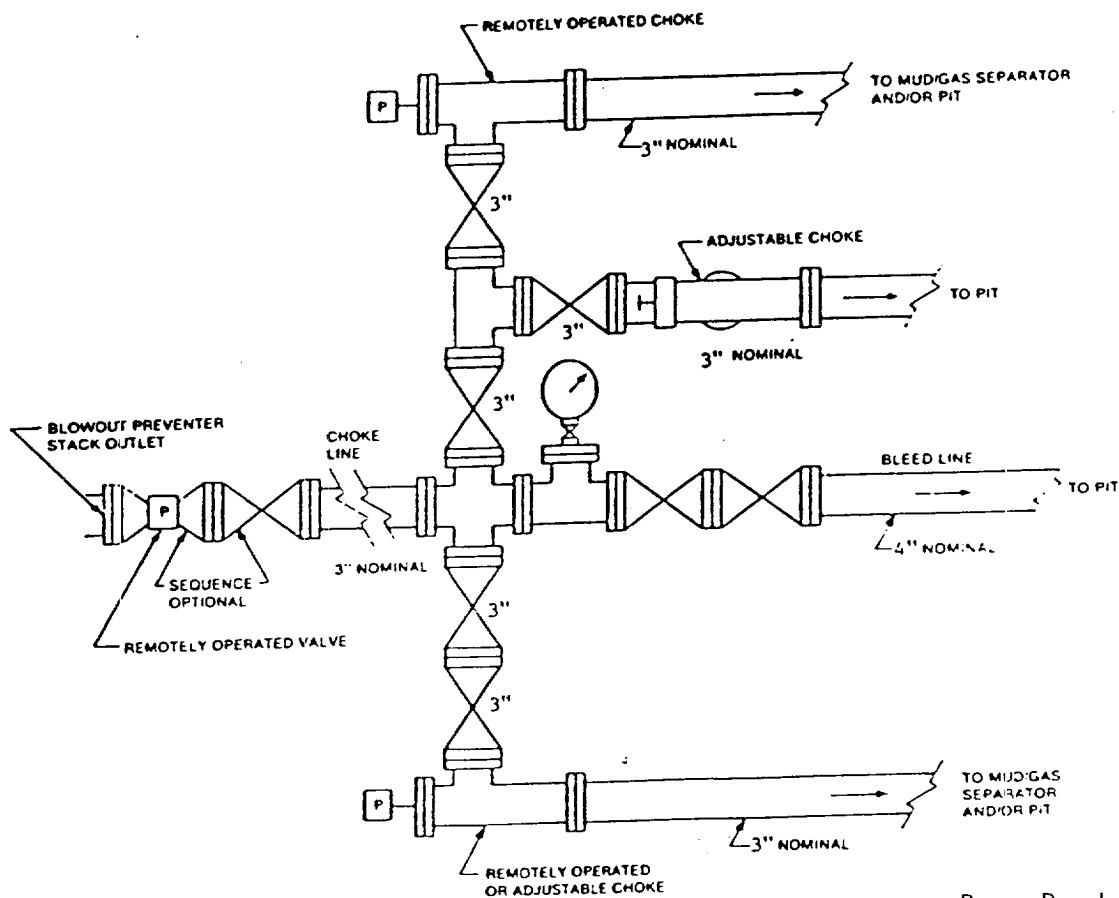


FIGURE K4-3. Typical choke manifold assembly for 10M and 15M rated working pressure service — surface installation.

Pogo Producing Company  
Covington "A" Federal #1  
660' FNL & 1980' FWL, Sec. 25  
T22S, R32E, Lea County, NM



# DRILLING MANUAL

BLOWOUT PREVENTION  
EQUIPMENT  
IADC Recommended BOP Stacks

Section K1  
Page 3

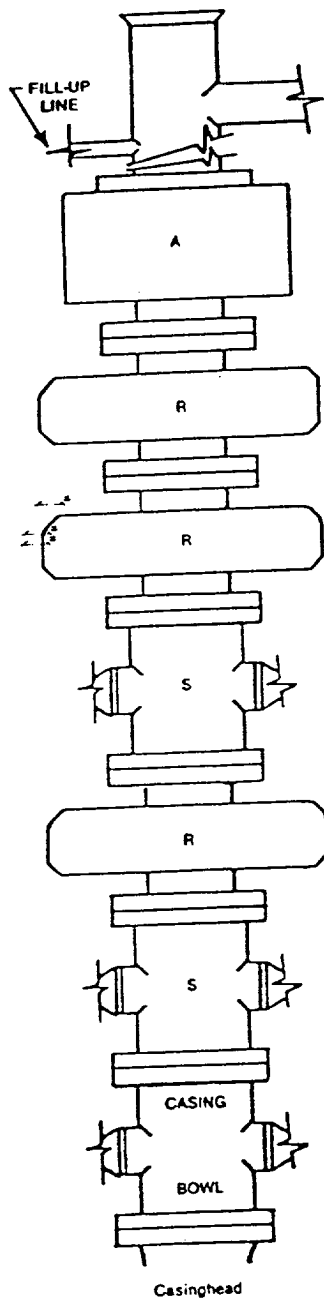


FIGURE K1-3. Recommended IADC Class 10 BOP stack arrangement SRSRRA, 10,000 psi WP. Lower drilling spool is optional with outlets on lower ram. Annular preventers 10,000 psi.

Pogo Producing Company  
Covington "A" Federal #1  
660' FNL & 1980' FWL, Sec. 25  
T22S, R32E, Lea County, NM



**INTEQ**

# DIRECTIONAL DRILLING TIME ESTIMATE

Pogo Producing Company  
Covington "A" Federal #1  
Lea County, New Mexico

DATE: 4/12/01

Steerable 10438' KOP

DEPTH INTERVAL	SECTION	BHA	PROPOSED BIT	EST. ROP FT./HR.	DRILLING HOURS	TRIP HOURS	CIRC. HOURS	RMNG/CONN/ SURV. HRS	TOTAL HOURS	STD-BY DAYS
10438 TO 10450	Time Drill Off Whipstock	4 3/4" M1X MWD	6 1/8" 4 Type	1.0	12.0	10.0	2.0	2.0	26.0	0.0
10450 TO 11271	Drill Curve to 25 Degree	4 3/4" M1X MWD	6 1/8" 4 Type	25.0	32.8	10.0	2.0	5.0	49.8	0.0
11271 TO 13463	Drill Tangent Section	4 3/4" M1X MWD	6 1/8" 3 Type 3 Bits	14.0	156.6	36.0	6.0	12.0	210.6	0.0
13463 TO 14463	Drill Drop Section	4 3/4" M1X MWD	6 1/8" 4 Type 4 Bits	10.0	100.0	56.0	8.0	6.0	170.0	0.0
14463 TO 15663	Hold Section	4 3/4" M1X MWD	6 1/8" 3 Type 6 Bits	4.0	300.0	90.0	12.0	7.0	409.0	0.0
<b>TOTAL</b>					<b>601.4</b>	<b>202.0</b>	<b>30.0</b>	<b>32.0</b>	<b>865.4</b>	<b>0.0</b>

JOB DAYS INCLUDE 15% CONTINGENCY

*TTL DRLG DAYS	41.5
TTL STAND-BY DAYS	0.0
TTL JOB DAYS	41.5

This is an estimate of time based on bit record and experience. This is not a guarantee of actual time.



# POGO PRODUCING CO.

Structure : Covington A Federal #1

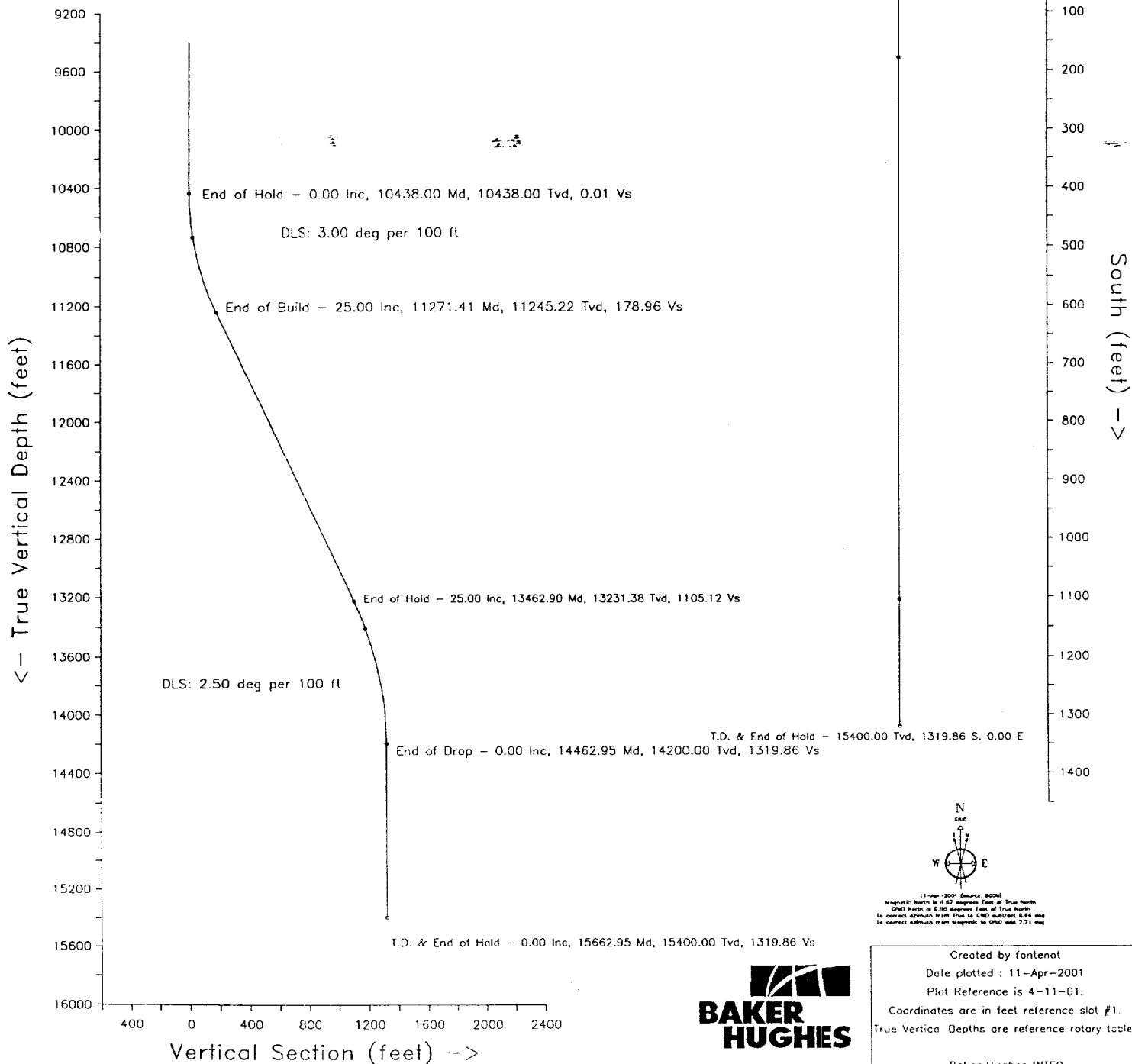
Slot : slot #1

Field :

Location : LEA COUNTY, NEW MEXICO

## WELL PROFILE DATA

Point	MD	Inc	Dir	TVD	North	East	V. Sect	Deg/100
Tie on	0.00	0.00	180.00	0.00	0.00	0.00	0.00	0.00
End of Hcld	10438.00	0.00	180.00	10438.00	-0.01	0.00	0.00	0.00
End of Build	11271.41	25.00	180.00	11245.22	-178.96	0.00	-96.69	3.00
End of Hcld	13462.90	25.00	180.00	13231.38	-1105.12	0.00	-597.10	0.00
End of Drop	14462.95	0.00	180.00	14200.00	-1319.86	0.00	-713.12	2.50
T.D. & End of Hold	15662.95	0.00	180.00	15400.00	-1319.86	0.00	-713.12	0.00



Azimuth 180.00 with reference 0.00 N, 0.00 E from slot #1

**BAKER  
HUGHES**

**INTEQ**



Measured Depth	Inclin. Degrees	Azimuth Degrees	True Vert Depth	RECTANGULAR COORDINATES		Dogleg Deg/100ft	
10000.00	0.00	180.00	10000.00	0.00 S	0.00 E	0.00	KOP #1
10438.00	0.00	180.00	10438.00	0.01 S	0.00 E	0.00	
10538.00	3.00	180.00	10537.95	2.62 S	0.00 E	3.00	
10638.00	6.00	180.00	10637.63	10.47 S	0.00 E	3.00	
10738.00	9.00	180.00	10736.77	23.52 S	0.00 E	3.00	
10838.00	12.00	180.00	10835.08	41.74 S	0.00 E	3.00	
10938.00	15.00	180.00	10932.31	65.08 S	0.00 E	3.00	
11038.00	18.00	180.00	11028.18	93.47 S	0.00 E	3.00	
11138.00	21.00	180.00	11122.44	126.85 S	0.00 E	3.00	
11238.00	24.00	180.00	11214.81	165.11 S	0.00 E	3.00	
11271.41	25.00	180.00	11245.22	178.96 S	0.00 E	3.00	EOC #1/Hold
11500.00	25.00	180.00	11452.39	275.57 S	0.00 E	0.00	
12000.00	25.00	180.00	11905.54	486.88 S	0.00 E	0.00	
12500.00	25.00	180.00	12358.70	698.18 S	0.00 E	0.00	
13000.00	25.00	180.00	12811.85	909.49 S	0.00 E	0.00	
13462.90	25.00	180.00	13231.38	1105.12 S	0.00 E	0.00	KOP #2
13462.95	25.00	180.00	13231.43	1105.15 S	0.00 E	2.50	
13562.95	22.50	180.00	13322.95	1145.41 S	0.00 E	2.50	
13662.95	20.00	180.00	13416.15	1181.65 S	0.00 E	2.50	
13762.95	17.50	180.00	13510.83	1213.79 S	0.00 E	2.50	
13862.95	15.00	180.00	13606.83	1241.77 S	0.00 E	2.50	
13962.95	12.50	180.00	13703.96	1265.54 S	0.00 E	2.50	
14062.95	10.00	180.00	13802.03	1285.04 S	0.00 E	2.50	
14162.95	7.50	180.00	13900.86	1300.26 S	0.00 E	2.50	
14262.95	5.00	180.00	14000.25	1311.14 S	0.00 E	2.50	
14362.95	2.50	180.00	14100.03	1317.68 S	0.00 E	2.50	EOC #2/Hold
14462.95	0.00	180.00	14200.00	1319.86 S	0.00 E	2.50	
14500.00	0.00	180.00	14237.05	1319.86 S	0.00 E	0.00	
15000.00	0.00	180.00	14737.05	1319.86 S	0.00 E	0.00	
15500.00	0.00	180.00	15237.05	1319.86 S	0.00 E	0.00	
15662.95	0.00	180.00	15400.00	1319.86 S	0.00 E	0.00	PBHL/TD

## WHIPSTOCK SETTING PROCEDURE BOTTOM SET TYPE

Prior to running the whipstock a bit and scraper run needs to be made to a setting depth +/- 100 ft. In wells where casing condition may be suspect a gauge ring run should be made to assure whipstock will go.

1. Run in hole with wireline set bridge plug and set 5-10 ft above a casing collar. TOOH This will ensure the window will not be cut out through a casing collar.
2. Run in hole with a bit and scraper and tag CIBP and strap pipe while coming out of hole. This measurement will be used when setting whipstock so accuracy is very important.
3. Run in hole with Whipstock, Starting Mill, Orientation Sub, Drill Collars or Weight Pipe and drill pipe string. Stop at a point 5-10 feet above CIBP and rig up wireline to run a Gyro. Take a Gyro reading and determine direction of whipstock face. Rotate pipe as needed to achieve required direction. Lower pipe to within 1 foot of CIBP and take another Gyro reading. Again, if needed, rotate pipe to required direction. This step may need to be repeated several times until confident whipstock is oriented to required direction.
4. Lower string to set Whipstock. Weight indicator will jump indicating lower plunger shear pin is sheared and whipstock is set. Continue setting down to shear starting mill bolt weight indicator will jump again indicating bolt is sheared and milling operations may begin.
5. Pick up kelly or power swivel depending on type of rig and start circulation. Pick-up string until starting mill has cleared top of whipstock and start rotation. Slowly lower string until weight indicator or torque gauge suggest mill is contacting casing wall. Adjust weight and speed until satisfied with penetration rate. Mill to a predetermined depth that will assure setting lug is completely removed and a cutout in the casing has been started. TOOH
6. Run in hole with METAL MUNCHER WINDOW MILL, String Mill and Watermelon Mill. Resume milling operations and mill until complete assembly has cleared casing. Pick up and lower string several times with out rotation to assure a good clean window. Circulate hole clean and TOOH.
7. If window milling assembly shows extreme wear consideration should be given to repeating step 6 with a new set of mills.
8. Drilling operations may commence.