DISTRICT I P.G. Box 1980, Hobbs, NM 88241-1980 DISTRICT II

State of New Mexico Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

Form C-101 Revised February 10,1994

Instructions on back

Submit to Appropriate District Office

P.O. Box Drawer DD, Artesia, NM 88211-0719 DISTRICT III

P.O. Box 2088

State Lease - 6 Copies Fee Lease - 5 Copies

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

7/14/97

Telephone

688-4606

Attached

Date

Santa Fe. New Mexico 87504-2088

☐ AMENDED REPORT P.O. Box 2088, Santa Fe, NM 87504-2088 APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE ² OGRID Number Operator Name and Address 022351 **TEXACO EXPLORATION & PRODUCTION INC.** API Number P.O. Box 3109, Midland Texas 79702 ⁵ Property Name Well No. **Property Code** STATE 'AN' 11093 Surface Location Feet From The Feet From The East/West Line County North/South Line Section Township Range Lot.idn Ul or lot no. **EAST** LEA 900 **NORTH** 1440 35-E В 7 18-S Proposed Bottom Hole Location If Different From Surface Feet From The Feet From The North/South Line East/West Line County Ul or lot no. Section Township Range Lot.ldn LEA 500 FAST 400 **NORTH** 35-E 18-S 10 Proposed Pool 2 ⁹Proposed Pool 1 VACUUM, ABO REEF WILDCAT, ATOKA ¹⁶ Ground Level Elevation Rotary or C.T. Lease Type Code Work Type Code WellType Code ROTARY 3969 19 Contractor ²⁰ Spud Date 18 Formation 17 Proposed Depth Multiple NABORS 9/1/97 ATOKA / ABO REEF No 11681 **Proposed Casing and Cement Program** WEIGHT PER FOOT SETTING DEPTH SACKS OF CEMENT EST. TOP SIZE OF CASING SIZE OF HOLE 600 450 SACKS SURFACE 14 3/4 42# 11 3/4 SURFACE 8 5/8 24# 3500 1000 SACKS 11 2100 SACKS 3400 5 1/2 17# 11681 7 7/8 22 Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zoneand proposed new productive zone. ntion program, if any. Use additional sheets if nece CEMENTING PROGRAM: SURFACE CASING: 250 SACKS CLASS C w/ 4% GEL, 2% CC (13.5 PPG, 1.74 CF/S, 9.1 GW/S). F/B 200 SACKS CLASS C w/ 2% CC (14.8 PPG, 1.34 CF/S, 6.3 GW/S) INTERMEDIATÉ CASING: 800 SACKS 35/65 POZ H w/ 6% GEL, 5% SALT, 1/4# FC (12.4 PPG, 2.14 CF/S, 11.9 GW/S). F/B 200 SACKS CLASS H (15. 6 PPG, 1,19 CF/S, 5,2 GW/S). PRODUCTION CASING: 1st STG - 1300 SACKS 50/50 POZ H w/ 2% GEL, 5% SALT, 1/4# FC (14.2 PPG, 1.35 CF/S, 6.3 GW/S). DV TOOL @ 6900": 2nd STG - 600 SACKS 35/65 POZ H w/ 6% GEL, 5% SALT, 1/4# FC (12.4 PPG, 2.14 CF/S, 11.9 GW/S). F/B 200 SACKS 50/50 POZ Permit Expires 1 Year From Ap 2005 H w/ 2% GEL, 5% SALT, 1/4# FC (14.2 PPG, 1.35 CF/S, 6.3 GW/S). Data Unless tham, angaige, APPLICATION FOR DIRECTIONAL DRILLING HAS BEEN FILED. (COPY ATTACHED) I hereby certify that the rules and regulations of the Oil Conservation OIL CONSERVATION DIVISION Division have been complied with and that the information given a is true and complete to the best of my knowledge and belief. ORIGINAL SIGNED BY CHRIS WILLIAMS DISTRICT | SUPERVISOR Approved By: Signature **Printed Name** C. Wade Howard Title: Expiration Date: Title Eng. Assistant Conditions of Approval: Werth approval

DISTRICT 1

DISTRICT 1 P. O. Box 1980, Hobbs, NM 88240

DISTRICT II P. O. Drawer DD, Artesia, NM 88210

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM B7410

DISTRICT IV P. O. Box 2088, Santo Fe, NM 87504-2088 State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

PO Box 2088 Santa Fe, NM 87504-2088 Form C-102 Revised February 10, 1994

Instructions on back

Submit to Appropriate District Office

State Lease-4 copies Fee Lease-3 copies

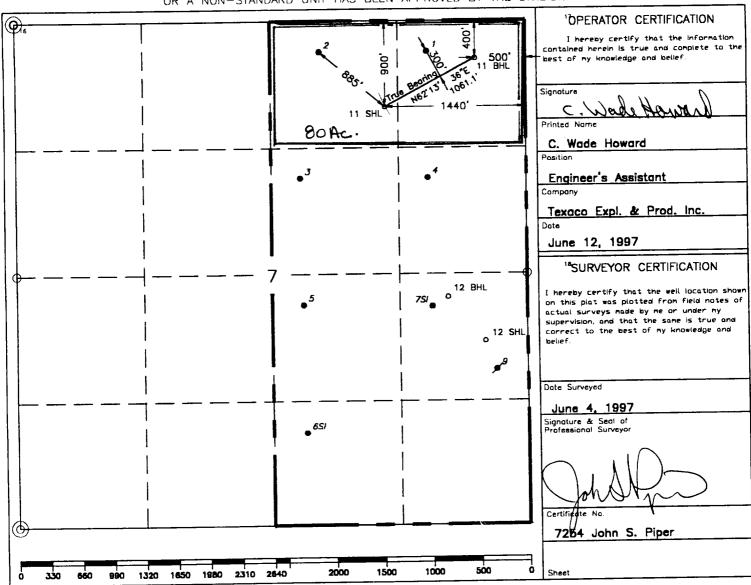
AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	² Pool Code	ool Name
30-025-34097	Wildcat, Atoka; Vacuum, Abo	Reef
Property Code	⁵ Property Name State "AN"	⁶ Well Number 11
'OGRID No. 22351	TEXACO EXPLORATION & PRODUCTION, INC.	⁹ Elevation 3969

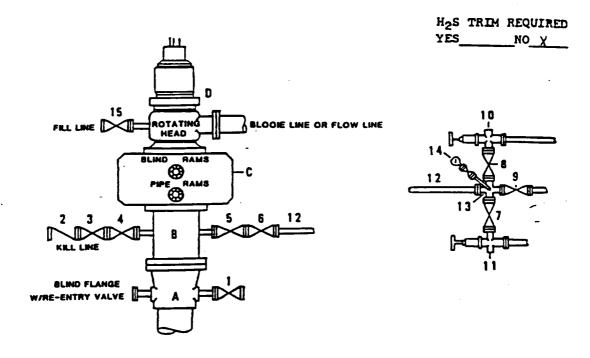
					" Surface L			= . <i>t</i>	70
UL or lot no.	Section	Township	Range	Lat Idn	Feet from the	North/South line	Feet from the	East/West line	⁷ County
В	7	18-S	35-E		300,	North	1440	East	Lea
	L	<u> </u>	11 B	ottom Hal	e Location If	Different From	Surface		
UL or lot no.	Section	Township	Range	Lat ldn	Feet from the	North/South line	Feet from the	East/West line	⁷ County
A	7	18-S	35-E		400°	North	500'	East	Lea
12Dedicated Acres	13,00	int or Infill	¹Consolid	ation Cade	¹⁵ Order No.				
40									

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.



DRILLING CONTROL CONDITION II-B 3000 WP

FOR AIR DRILLING OR WHERE NITROGEN OR AIR BLOWS ARE EXPECTED



DRILLING CONTROL

MATERIAL LIST - CONDITION II - B

	Texaco Wellhead
X	Texaco wellneso
8 .	30000 W.P. drilling spool with a 2" minimum flanged outlet for kill line and 3" minimum flanged outlet for choke line.
c	30000 W.P. Dual ram type preventer, hydraulic operated with 1" steel, 30000 W.P. control lines (where substructure height is adequate, 2 - 30000 W.P. single ram type preventers may be utilized).
D	Rotating Head with fill up outlet and extended Bloome Line.
1,3,4,	$2^{\rm sinimum}$ 3000% W.P. flanged full opening steel gate valve, or Halliburton Lo Torc Plug valve.
2	2" minimum 3000# W.P. back pressure valve.
5,6,9	$\ensuremath{\mbox{3^{st}}}$ minimum 3000f W.P. flanged full opening steel gate valve, or Halliburton Lo Torc Plug valve.
12]" minimum schedule 80, Grade "B", seamless line pipe.
13	2" minimum x 3" minimum 3000% W.P. flanged cross.
10,11	2" minimum 3000# W.P. adjustable choke bodies.
14	Cameron Hud Gauge or equivalent (location optional in choke line). $ \\$
15	2" minimum 3000f W.P. flanged or threaded full opening steel gate valve, or Halliburton Lo Torc Plug valve.



TEXACO, INC. MIGLAGE BIVISION



DATE EST HO DRG. NO. CHECKED BY

APPROVED BY

500 (Verth Lardine Midland TX Text)

FIG Box 3109 Midiand TX 79702

June 19, 1997

GOV - STATE AND LOCAL GOVERNMENTS

Directional Drilling
State "AN" Well No. 11
Wildcat Atoka: Vacuum, Abo Reef Fields
Lea County, New Mexico

State of New Mexico Energy and Minerals Department Oil Conservation Division 2040 South Pacheco Santa Fe, New Mexico 87505

Attention: Mr. Michael E. Stogner

Gentlemen:

Administrative approval, Rule 111 D, is requested to directionally drill the captioned well to an orthodox bottomhole location in the Atoka. The Abo Reef will be an unorthodox location.

This well is being drilled as a vertical development well in the Abo Reef and must be directionally drilled to penetrate a prospective Atoka pay across a fault northeast of the surface location. Attached for your information is a copy of our directional plans, a type log section, and Form C-102.

The "affected" offset operators to this well have been notified of this request (see attached offset operator's list and certified mail receipts).

Any questions concerning this request should be directed to me at (915) 688-4606.

Yours very truly,

C. W. Howard

C. w. Howard Engineer's Assistant

Lower Howard

CWH:

CC: NMOCD, P. O. Box 1980, Hobbs, NM 88240

Attachments

DISTRICT 1

DISTRICT !
P. D. Box 1980, Hobbs, NM 88240

DISTRICT II
P. O. Drower DD, Artesia, NM 88210

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

DISTRICT IV P. D. Box 2088, Santa Fe, NM 87504-2088 State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 87504-2088 Form C-102 Revised February 10, 1994

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Fee Lease-3 copies

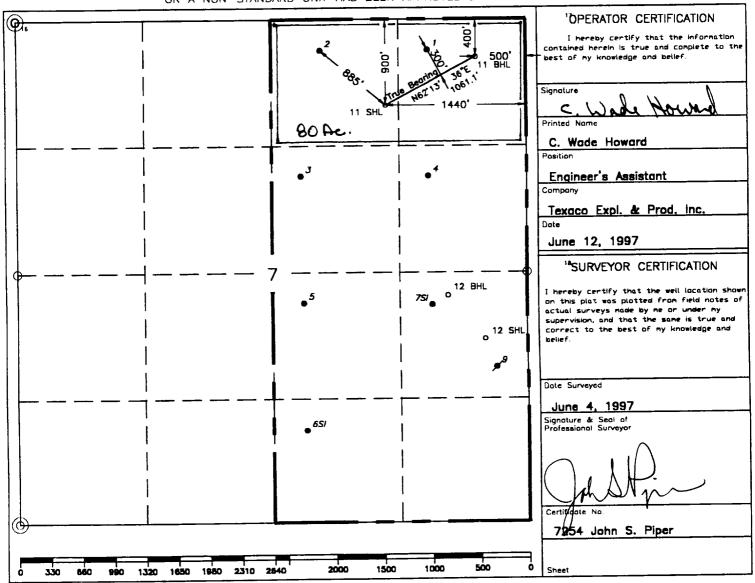
MENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	² Pool Code Wildcat, Atoka; Vacuun	n, Abo Reef
Property Code	⁵ Property Name State "AN"	Well Number
OGRID No. 22351	TEXACO EXPLORATION & PRODUCTION, IN	C. S3969°

					" Surface L	<u>ocation</u>			70
UL or lot no.	Section	Township	Range	Lat Idn	Feet from the	North/South line	Feet from the	East/West line	County
૯	7	18-S	35-E		900'	North	1440'	East	Lea
11 Bottom Hole Location If Different From Surface									
UL or lat no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	Eost/West line	⁷ County
A	7	18-S	35-E		400*	North	500'	East	Lea
1Dedicated Acres	13Joi	nt or Infill	¹ Consolid	ation Code	¹⁵ Order No.				
40									

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.





Texaco Exploration and Production Inc.

500 North Lorain4 Midiano TX 79701

PIC Box 3109 Midland TX 79702

June 19, 1997

GOV - STATE AND LOCAL GOVERNMENTS
Directional Drilling
State "AN" Well No. 11
Sec. 7, T-18-S, R-35-E
Lea County, New Mexico

TO THE OFFSET OPERATORS

Gentlemen:

As an offset operator to the captioned lease, you are being furnished with a copy of our Application to directionally drill the captioned well. If you have no objection, please sign the waiver at the bottom of this letter and return in the enclosed envelope.

Any questions concerning this request should be directed to me at (915) 688-4606.

Yours very truly,

C. Wade Hours

C. W. Howard Engineer Assistant

CWH: cwh

File

WAIVER APPROVED:

COMPANY:		
BY:		
DATE:		

OFFSET OPERATOR'S LIST State "AN" Well No. 11 LEA COUNTY, NEW MEXICO

Texaco Exploration and Production Inc. P. O. Box 3109 Midland, Texas 79702

Marathon Oil Company P. O. Box 552 Midland, TX 79702

Shell Western E & P Inc. P. O. Box 576 Houston, TX 77001

Lynx Petroleum Consultants, Inc. P. O. Box 1666 Hobbs, NM 88241

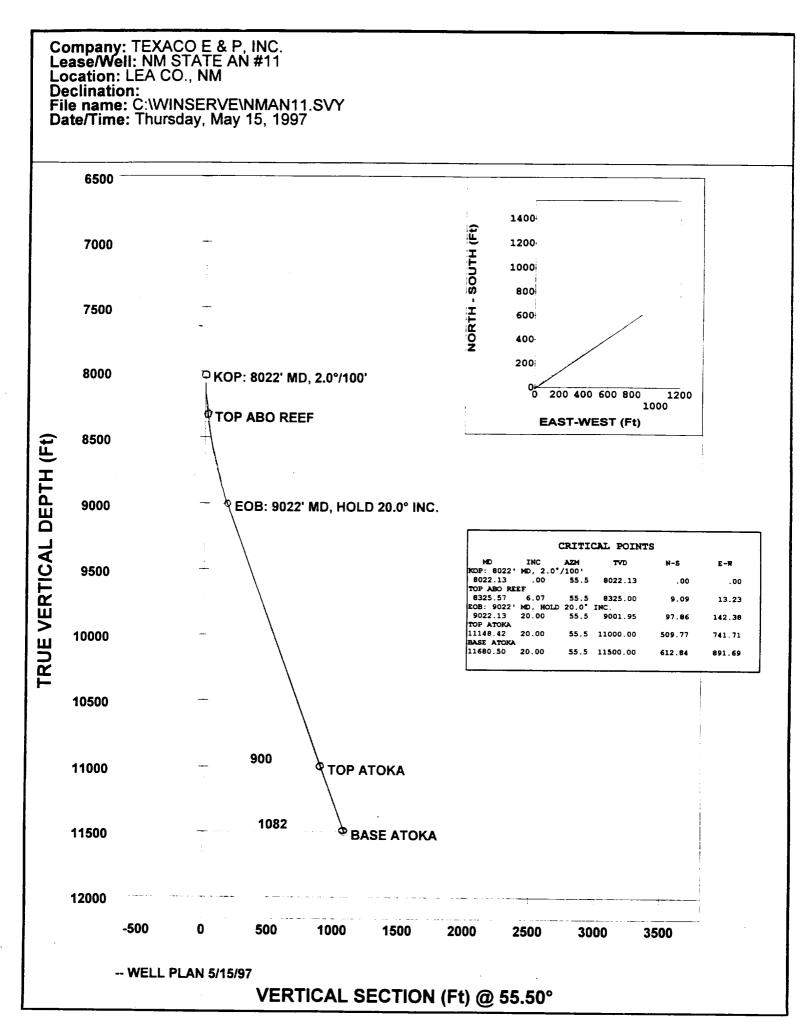
Sun Operating Ltd. Partnership P. O. Box 2880 Dallas, TX 75221

Yates Petroleum Corporation Yates Drilling Company Abo Petroleum Corporation Myco Industries, Inc. 105 South 4TH St. Artesia, NM 88210

SENDER: Complete its 1 and/or 2 for additional services. Complete it 4a, and 4b. Print your n and address on the reverse of this form so that card to you. Attach this form to the front of the mailpiece, or on the back if spermit. Write "Return Receipt Requested" on the mailpiece below the are The Return Receipt will show to whom the article was delivered delivered. 3. Article Addressed to: Marathon 0il Company P. 0. Box 552 Midland, Texas 79702	we can return th	l also wish to receive the ollowing services (for an extra fee):
 Attach this form to the front of the mailpiece, or on the back if sp permit. 	pace does not	1. Addressee's Address
"Write"Return Receipt Requested" on the mailpiece below the ar "The Return Receipt will show to whom the article was delivered		2. Restricted Delivery
delivered.		Consult postmaster for fee.
3. Article Addressed to:	4a. Article N	umber
Marathon Oil Company	4b. Service 1	394 207
P. O. Box 552	Registere	d 1 Certified
Midland, Texas 79702	☐ Express I	Mail Insured
	2 Return Rec	ceipt for Merchandise 🔲 COD
	7. Date of De	1. Addressee's Address 2. Restricted Delivery Consult postmaster for fee. umber 394 207 Type ad
5. Received By: (Print Name)	8. Addresses and fee is	's Address (Only if requested paid)
6. Signature: (Addressee or Agent)	7	
X / m		
PS Form 3811 , December 1994		Domestic Return Receipt
SENDER:	-	
■Complete items 1 and/or 2 for additional services. ■Complete items 3, 4a, and 4b.		I also wish to receive the following services (for an
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		394 206
Shell Western E & P Inc.	4b. Service 1	
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	r	ceipt for Merchandise
		alivedUN 2 3 1997
5. Received By: (Print Name)	0.444	
	8. Addressee and fee is	s's Address (Only if requested paid)
6. Signature: (Addressee or Agent)		
X & Bures		paid)
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<u>00</u>	Abo Petroleum Corp.	☐ Registere	d XXI Certified (
SS	Myco Industries, Inc. 105 South 4th Street	☐ Express N	Aail □ Insured .
끰	Artesia, New Mexico 88210		eipt for Merchandise COD
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Job Number: P97-224

Company: TEXACO E & P, INC.

Lease/Well: NM STATE AN #11

Location: LEA CO., NM

Rig Name:

RKB: G.L. or M.S.L.: State/Country:

Declination:

Grid:

File name: C:\WINSERVE\NMAN11.SVY

Date/Time: 15-May-97 / 18:09 Curve Name: WELL PLAN 5/15/97

PHOENIX DRILLING SERVICES, INC.

WINSERVE SURVEY CALCULATIONS

Minimum Curvature Method Vertical Section Plane 55.50

Measured Depth FT	inci Angle Deg	Drift Direction Deg	True Vertical Depth	Subsea TVD FT	N-S FT	E-W FT	Vertical Section FT	C L O S Distance FT	URE Direction Deg	Dogleg Severity Deg/100	
KOP: 80)22' M D	, 2.0°/100)'						 		
8022.13	.00	55.50	8022.13	4032.13	.00	.00	.00	.00	.00	.00	
8072.13	1.00	55.50	8072.13	4082.13	.25	.36	.44	.44	55.50	2.00	==
8122.13	2.00	55.50	8122.11	4132.11	.99	1.44	1.75	1.75	55.50	2.00	
8172.13	3.00	55.50	8172.06	4182.06	2.22	3.24	3.93	3.93	55.50	2.00	
8222.13	4.00	55.50	8221.97	4231.97	3.95	5.75	6.98	6.98	55.50	2.00	
8272.13	5.00	55.50	8271.81	4281.81	6.17	8.98	10.90	10.90	55.50	2.00	
8322.13	6.00	55.50	8321.58	4331.58	8.89	12.93	15.69	15.69	55.50	2.00	
TOP AB	O REE									2.00	
8325.57	6.07	55.50	8325.00	4335.00	9.09	13.23	16.05	16.05	55.50	2.00	
8372.13	7.00		8371.26	4381.26	12.09	17.60	21.35	21.35	55.50	2.00	
8422.13	8.00		8420.83	4430.83	15.7 9	22.98	27.88	27.88	55.50	2.00	
8472.13	9.00		8470.28	4480.28	19.98	29.07	35.27	35.27	55.50	2.00	
8522.13	10.00	55.50	8519.60	4529.60	24.65	35.87	43.52	43.52	55.50	2.00	
8572.13	11.00	55.50	8568.76	4578.76	29.81	43.38	52.63	52.63	55.50	2.00	
8622.13	12.00		8617.75	4627.75	35.46	51.59	62.60	62.60	55.50 55.50	2.00	
8672.13	13.00		8666.57	4676.57	41.59	60.51	73.42	73.42	55.50 55.50	2.00	
8722.13	14.00		8715.19	4725.19	48.20	70.13	85.10	85.10	55.50 55.50	2.00	
8772.13	15.00	. 55.50	8763.59	4773.59	55.29	80.45	97.62	97.62	55.50	2.00	
8822.13	16.00	55.50	8811.77	4821.77	62.86	91.46	110.98	140.00	EE E0	0.00	
8872.13	17.00		8859.71	4869.71	70.90	103.16	125.18	110.98 125.18	55.50 55.50	2.00	
8922.13	18.00		8907.40	4917.40	79.42	115.55	140.21	140.21	55.50 55.50	2.00	
8972.13	19.00		8954.81	4964.81	88.40	128.63	156.08	156.08	55.50 55.50	2.00 2.00	
		HOLD 2				120.00	.00.00	100.00	33.30	2.00	7
9022.13	20.00		9001.95	5011.95	97.86	142.38	172.77	172.77	55.50	2.00	
9122.13	20.00	55.50	9095.92	5105.92	117.23	170.57	206.97	206.97	55.50	.00	لك_

Measured Depth FT	inci Angle Deg	Drift Direction Deg	True n Vertical Depth	Subsea TVD FT	N-S FT	E-W FT	Vertical Section FT		URE Direction Deg	Dogleg Severity Deg/100
9222.13	20.00	55.50	9189.88	5199.88	136.60	198.76	241.17	241.17	55.50	.00
9322.13	20.00	55.50	9283.85	5293.85	155.97	226.94	275.37	275.37	55.50	.00
9422.13	20.00	55.50	9377.82	5387.82	175.35	255.13	309.58	309.58	55.50	.00
9522.13	20.00	55.50	9471.79	5481.79	194.72	283.32	343.78	343.78	55.50	.00
9622.13	20.00	55.50	9565.76	5575.76	214.09	311.50	377.98	377.98	55.50	.00
9722.13	20.00	55.50	9659.73	5669.73	233.46	339.69	412.18	412.18	55.50	.00
9822.13	20.00	55.50	9753.70	5763.70	252.83	367.88	446.38	446.38	55.50	.00
9922.13	20.00	55.50	9847.67	5857.67	272.21	396.06	480.59	480.59	55.50	.00
10022.13	20.00	55.50	9941.64	5951.64	291.58	424.25	514.79	514.79	55.50	.00
10122.13	20.00	55.50	10035.61	6045.61	310.95	452.44	548.99	548.99	55.50	.00
10222.13	20.00	55.50	10129.58	6139.58	330.32	480.62	583.19	583.19	55.50	.00
10322.13	20.00	⁻ 55.50	10223.55	6233.55	349.70	508.81	617.39	617.39	55.50	.00
10422.13	20.00	55.50	10317.52	6327.52	369.07	537.00	651.60	651.60	55.50	.00
10522.13	20.00	55.50	10411.49	6421.49	388.44	565.18	685.80	685.80	55.50	.00
10622.13	20.00	55.50	10505.45	6515.45	407.81	593.37	720.00	720.00	55.50	.00
10722.13	20.00	55.50	10599.42	6609.42	427.18	621.56	754.20	754.20	55.50	.00
10822.13	20.00		10693.39	6703.39	446.56	649.74	788.40	788.40	55.50	.00
10922.13	20.00		10787.36	6797.36	465.93	677.93	822.61	822.61	55.50	.00
11022.13	20.00		10881.33	6891.33	485.30	706.12	856.81	856.81	55.50	.00
11122.13	20.00	55.50	10975.30	6985.30	504.67	734.30	891.01	891.01	55.50	.00
TOP AT	OKA				· · · · · · · · · · · · · · · · · · ·					
11148.42	20.00	55.50	11000.00	7010.00	509.77	741.71	900.00	900.00	55.50	.00
11248.42	20.00		11093.97	7103.97	529.14	769.90	934.20	934.20	55.50	.00
11348.42	20.00		11187.94	7197.94	548.51	798.09	968.40	968.40	55.50	.00
11448.42	20.00		11281.91	7291.91	567.88	826.27	1002.61	1002.61	55.50	.00
11548.42	20.00	55.50 °	11375.88	7385.88	587.25	854.46	1036.81	1036.81	55.50	.00
11648.42	20.00	55.50 °	11469.85	7479.85	606.63	882.65	1071.01	1071.01	55.50	.00
BASE A	TOKA									
11680.50	20.00	55.50	11500.00	7510.00	612.84	891.69	1081.99	1081.99	55.50	.00

