



ATS-07-538

CONFIDENTIAL **OCD-ARTESIA**Form 3160-3
(February 2005)

1140

SEP 07 2007
OCD-ARTESIAUNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**HIGH CAVEKARST****Split Estate**FORM APPROVED
OMB No. 1004-0137
Expires March 31, 20075. Lease Serial No.
NMNM 013074 *BA*
6. If Indian, Allottee or Tribe Name1a. Type of work. ☒ DRILL ☐ REENTER1b. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone2. Name of Operator
CHESAPEAKE OPERATING, INC. ATTN: LINDA GOOD3a. Address P.O. BOX 18496
OKLAHOMA CITY, OK 73154-04963b. Phone No. (include area code)
405-767-4275

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

8. Lease Name and Well No.
MOSAIC 34 FEDERAL 3H9. API Well No.
30-015-3600110. Field and Pool, or Exploratory
Undes. Willow Lake

4. Location of Well (Report location clearly and in accordance with any State requirements *)

At surface 2122' FSL & 2568' FWL, NESW

At proposed prod. zone 2310' FSL & 330' FWL, NWSW

Carlsbad Controlled Water Basin11. Sec, T, R M or Blk. and Survey or Area
34-24S-28E

14. Distance in miles and direction from nearest town or post office*

12. County or Parish
EDDY CO.13. State
NM15. Distance from proposed*
location to nearest
property or lease line, ft
(Also to nearest drg unit line, if any)16. No of acres in lease
24017. Spacing Unit dedicated to this well
8018. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft19. Proposed Depth
5200'20. BLM/BIA Bond No. on file
NM #263421. Elevations (Show whether DF, KDB, RT, GL, etc.)
GL 2989' est. KB 3007' est.

22. Approximate date work will start*

23. Estimated duration

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, must 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 must 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
BLM.

25. Signature

Name (Printed/Typed)

Paul Hagemeyer

Date

8/1/07

Title

Vice President - Regulatory Compliance

Approved by (Signature)

Name (Printed/Typed)

STEVE CAFFEY

Date

7/5/07

Title

FOR 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 TWO YEARSTitle 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)

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL****APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED**

State of New Mexico

DISTRICT I

1625 N. FRENCH DR., HOBBS, NM 88240

Energy, Minerals and Natural Resources Department

Form C-102

DISTRICT II

1301 W. GRAND AVENUE, ARTESIA, NM 88210

OIL CONSERVATION DIVISION

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

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

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV

1220 N. ST. FRANCIS DR., SANTA FE, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code 64453	Pool Name Und. Willow Lake; Delaware
Property Code 36004	Property Name MOSAIC 34 FEDERAL	Well Number 3H
OGRID No. 147179	Operator Name CHESAPEAKE OPERATING, INC.	Elevation 3003'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	34	24-S	28-E		2122	SOUTH	2568	WEST	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
L	34	24-S	28-E		2310	SOUTH	330	WEST	EDDY

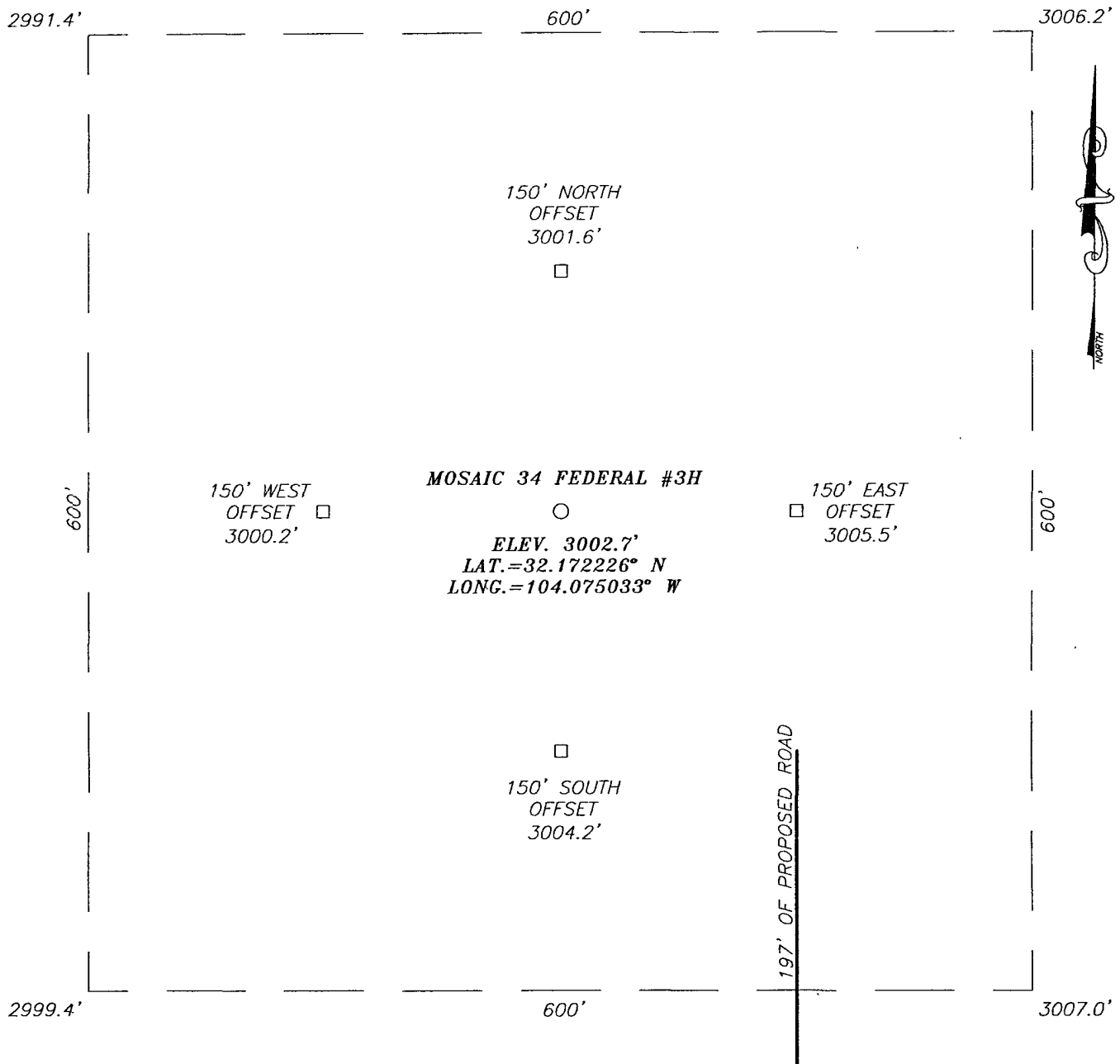
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
80			

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

<p>BOTTOM HOLE LOCATION Y=426649.3 N X=577683.9 E</p> <p>GRID AZ.=274°30'50" DIST.=2245.6'</p> <p>330' B.H.</p> <p>2568'</p> <p>2991.4'</p> <p>600'</p> <p>3006.2'</p> <p>2999.4'</p> <p>3007.0'</p> <p>2122'</p> <p>2310'</p>	<p>GEODETTIC COORDINATES NAD 27 NME SURFACE HOLE LOCATION Y=426472.6 N X=579921.9 E LAT.=32.172226° N LONG.=104.075033° W</p>	<p>OPERATOR CERTIFICATION</p> <p>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.</p> <p><i>Craig Barwood</i> 6/26/07 Signature Date CRAIG BARWOOD Printed Name</p>
	<p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>RONALD J. EIDSON NEW MEXICO Professional Surveyor 3239 11/19/07</p> <p>Certificate No. 12641 RONALD EIDSON 3239</p>	

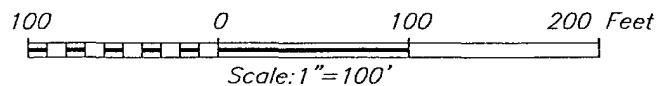
EXHIBIT A-1

SECTION 34, TOWNSHIP 24 SOUTH, RANGE 28 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

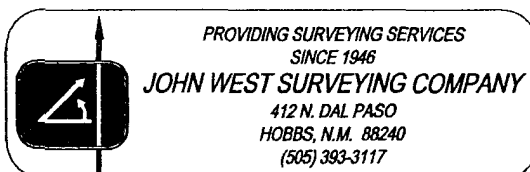
FROM MALAGA NEW MEXICO, GO SOUTH ON U.S. HWY. #285 FOR APPROX. 3.6 MILES. TURN RIGHT AND GO WEST APPROX. 0.3 MILES TO A PROPOSED ROAD SURVEY. FOLLOW ROAD SURVEY 197 FEET TO THIS LOCATION.



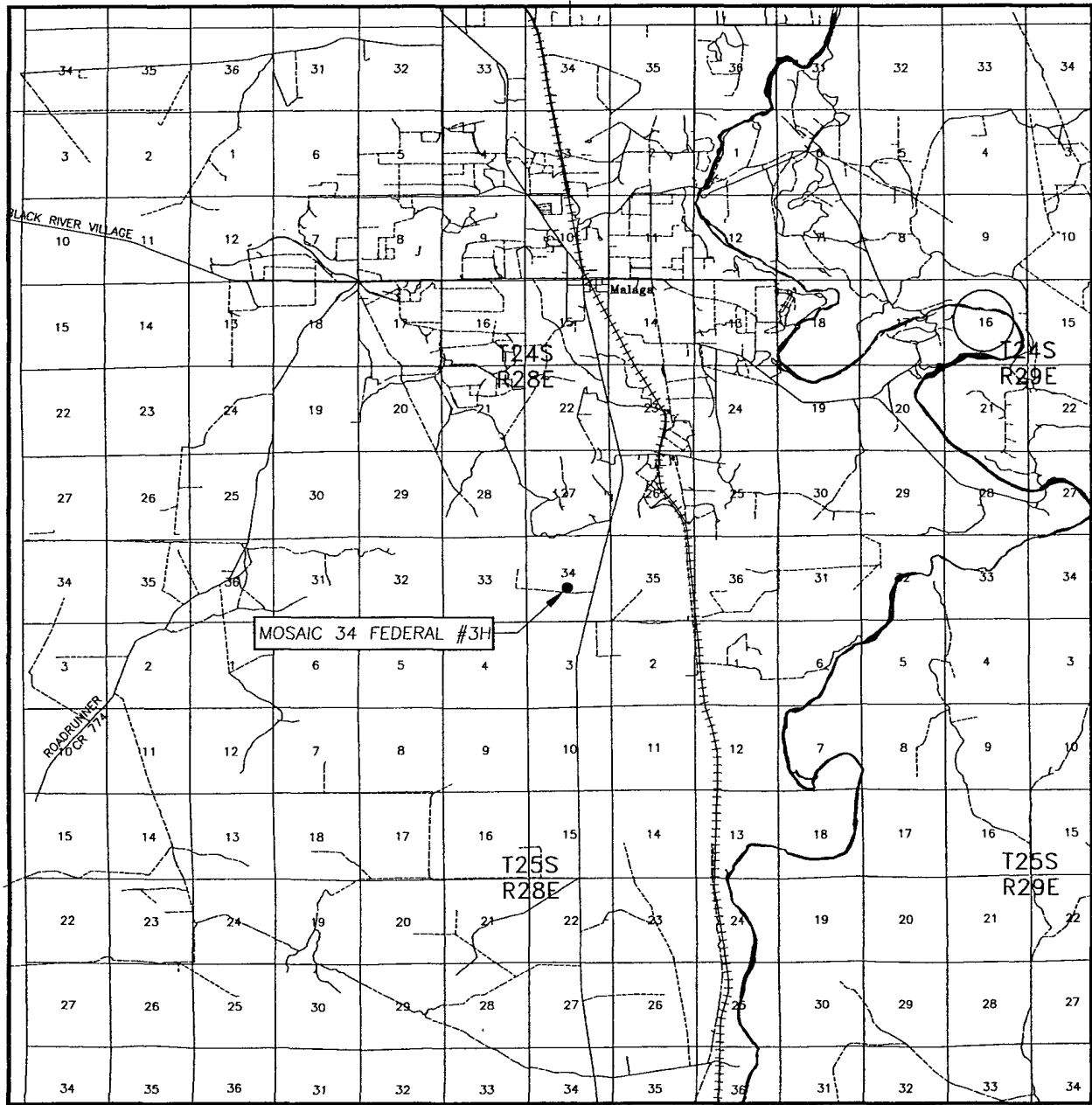
CHESAPEAKE OPERATING, INC.

MOAISAIC 34 FEDERAL #3H
LOCATED 2122 FEET FROM THE SOUTH LINE
AND 2568 FEET FROM THE WEST LINE OF SECTION 34,
TOWNSHIP 24 SOUTH, RANGE 28 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.

Survey Date: 6/13/07		Sheet 1 of 1 Sheets	
W.O. Number: 07.11.0736		Dr By: LA	Rev 1:N/A
Date: 6/18/07	Disk: CD#6	07110736	Scale: 1"=100'



VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 34 TWP. 24-S RGE. 28-E

SURVEY N.M.P.M.

COUNTY EDDY STATE NEW MEXICO

DESCRIPTION 2122' FSL & 2568' FEL

ELEVATION 3003'

OPERATOR CHESAPEAKE OPERATING, INC.

LEASE MOSAIC 34 FEDERAL

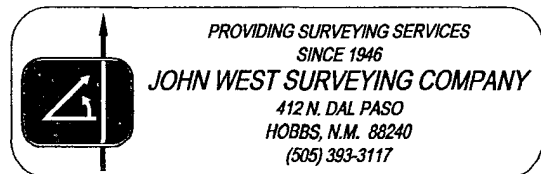


EXHIBIT A-3

This topographic map depicts the Willow Lake area, characterized by a large hatched region labeled 'WILLOW LAKE'. A proposed road, labeled '197' OF PROPOSED ROAD', is shown running horizontally across the center. A vertical road, labeled 'RD. #231 (ONSUREZ RD.)', intersects the proposed road. The map includes numerous contour lines and elevation points marked with 'x' and 'T' (e.g., 2969T, 2978T, 2985T, 2999T, 3000T, 3005T, 3006T, 3007T, 3008T, 3009T, 3010T, 3011T, 3012T, 3013T, 3014T, 3015T, 3016T, 3017T, 3018T, 3019T, 3020T, 3021T, 3022T, 3023T, 3024T, 3025T, 3026T, 3027T, 3028T, 3029T, 3030T, 3031T, 3032T, 3033T, 3034T, 3035T, 3036T, 3037T, 3038T, 3039T, 3040T, 3041T, 3042T, 3043T, 3044T, 3045T, 3046T, 3047T, 3048T, 3049T, 3050T, 3051T, 3052T, 3053T, 3054T, 3055T, 3056T, 3057T, 3058T, 3059T, 3060T, 3061T, 3062T, 3063T, 3064T, 3065T, 3066T, 3067T, 3068T, 3069T, 3070T, 3071T, 3072T, 3073T, 3074T, 3075T, 3076T, 3077T, 3078T, 3079T, 3080T, 3081T, 3082T, 3083T, 3084T, 3085T, 3086T, 3087T, 3088T, 3089T, 3090T, 3091T, 3092T, 3093T, 3094T, 3095T, 3096T, 3097T, 3098T, 3099T, 3100T, 3101T, 3102T, 3103T, 3104T, 3105T, 3106T, 3107T, 3108T, 3109T, 3110T, 3111T, 3112T, 3113T, 3114T, 3115T, 3116T, 3117T, 3118T, 3119T, 3120T, 3121T, 3122T, 3123T, 3124T, 3125T, 3126T, 3127T, 3128T, 3129T, 3130T, 3131T, 3132T, 3133T, 3134T, 3135T, 3136T, 3137T, 3138T, 3139T, 3140T, 3141T, 3142T, 3143T, 3144T, 3145T, 3146T, 3147T, 3148T, 3149T, 3150T, 3151T, 3152T, 3153T, 3154T, 3155T, 3156T, 3157T, 3158T, 3159T, 3160T, 3161T, 3162T, 3163T, 3164T, 3165T, 3166T, 3167T, 3168T, 3169T, 3170T, 3171T, 3172T, 3173T, 3174T, 3175T, 3176T, 3177T, 3178T, 3179T, 3180T, 3181T, 3182T, 3183T, 3184T, 3185T, 3186T, 3187T, 3188T, 3189T, 3190T, 3191T, 3192T, 3193T, 3194T, 3195T, 3196T, 3197T, 3198T, 3199T, 3200T, 3201T, 3202T, 3203T, 3204T, 3205T, 3206T, 3207T, 3208T, 3209T, 3210T, 3211T, 3212T, 3213T, 3214T, 3215T, 3216T, 3217T, 3218T, 3219T, 3220T, 3221T, 3222T, 3223T, 3224T, 3225T, 3226T, 3227T, 3228T, 3229T, 3230T, 3231T, 3232T, 3233T, 3234T, 3235T, 3236T, 3237T, 3238T, 3239T, 3240T, 3241T, 3242T, 3243T, 3244T, 3245T, 3246T, 3247T, 3248T, 3249T, 3250T, 3251T, 3252T, 3253T, 3254T, 3255T, 3256T, 3257T, 3258T, 3259T, 3260T, 3261T, 3262T, 3263T, 3264T, 3265T, 3266T, 3267T, 3268T, 3269T, 3270T, 3271T, 3272T, 3273T, 3274T, 3275T, 3276T, 3277T, 3278T, 3279T, 3280T, 3281T, 3282T, 3283T, 3284T, 3285T, 3286T, 3287T, 3288T, 3289T, 3290T, 3291T, 3292T, 3293T, 3294T, 3295T, 3296T, 3297T, 3298T, 3299T, 3300T, 3301T, 3302T, 3303T, 3304T, 3305T, 3306T, 3307T, 3308T, 3309T, 3310T, 3311T, 3312T, 3313T, 3314T, 3315T, 3316T, 3317T, 3318T, 3319T, 3320T, 3321T, 3322T, 3323T, 3324T, 3325T, 3326T, 3327T, 3328T, 3329T, 3330T, 3331T, 3332T, 3333T, 3334T, 3335T, 3336T, 3337T, 3338T, 3339T, 3340T, 3341T, 3342T, 3343T, 3344T, 3345T, 3346T, 3347T, 3348T, 3349T, 3350T, 3351T, 3352T, 3353T, 3354T, 3355T, 3356T, 3357T, 3358T, 3359T, 3360T, 3361T, 3362T, 3363T, 3364T, 3365T, 3366T, 3367T, 3368T, 3369T, 3370T, 3371T, 3372T, 3373T, 3374T, 3375T, 3376T, 3377T, 3378T, 3379T, 3380T, 3381T, 3382T, 3383T, 3384T, 3385T, 3386T, 3387T, 3388T, 3389T, 3390T, 3391T, 3392T, 3393T, 3394T, 3395T, 3396T, 3397T, 3398T, 3399T, 3400T, 3401T, 3402T, 3403T, 3404T, 3405T, 3406T, 3407T, 3408T, 3409T, 3410T, 3411T, 3412T, 3413T, 3414T, 3415T, 3416T, 3417T, 3418T, 3419T, 3420T, 3421T, 3422T, 3423T, 3424T, 3425T, 3426T, 3427T, 3428T, 3429T, 3430T, 3431T, 3432T, 3433T, 3434T, 3435T, 3436T, 3437T, 3438T, 3439T, 3440T, 3441T, 3442T, 3443T, 3444T, 3445T, 3446T, 3447T, 3448T, 3449T, 3450T, 3451T, 3452T, 3453T, 3454T, 3455T, 3456T, 3457T, 3458T, 3459T, 3460T, 3461T, 3462T, 3463T, 3464T, 3465T, 3466T, 3467T, 3468T, 3469T, 3470T, 3471T, 3472T, 3473T, 3474T, 3475T, 3476T, 3477T, 3478T, 3479T, 3480T, 3481T, 3482T, 3483T, 3484T, 3485T, 3486T, 3487T, 3488T, 3489T, 3490T, 3491T, 3492T, 3493T, 3494T, 3495T, 3496T, 3497T, 3498T, 3499T, 3500T, 3501T, 3502T, 3503T, 3504T, 3505T, 3506T, 3507T, 3508T, 3509T, 3510T, 3511T, 3512T, 3513T, 3514T, 3515T, 3516T, 3517T, 3518T, 3519T, 3520T, 3521T, 3522T, 3523T, 3524T, 3525T, 3526T, 3527T, 3528T, 3529T, 3530T, 3531T, 3532T, 3533T, 3534T, 3535T, 3536T, 3537T, 3538T, 3539T, 3540T, 3541T, 3542T, 3543T, 3544T, 3545T, 3546T, 3547T, 3548T, 3549T, 3550T, 3551T, 3552T, 3553T, 3554T, 3555T, 3556T, 3557T, 3558T, 3559T, 3560T, 3561T, 3562T, 3563T, 3564T, 3565T, 3566T, 3567T, 3

CONTOUR INTERVAL:
MALAGA, N.M. - 10'

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

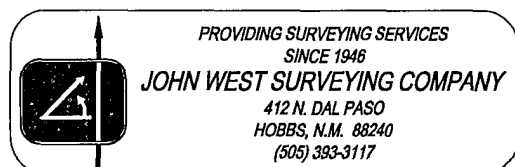


EXHIBIT A-4

