DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980
DISTRICT II
P.O. Box Drawer DD, Artesia, NM 88211-0719
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410
DISTRICT IV
P.O. Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-101
Revised February 10,199
Instructions on bac
Submit to Appropriate District Offic
State Lease - 6 Copie
Fee Lease - 5 Copie
☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1 Operator Name and Address	2 OGRID Number
CHEVRON USA INC 15 SMITH RD, MIDLAND, TX 79705	4323
	3 API Number 30-025-25129

4 Property Code	5 Property Name	6 Well No.
2682	H.T. MATTERN NCT-B	20

7 Surface Location

Ul or lot no.	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
F	31	21-S	37-E		1980'	NORTH	1961'	WEST	LEA

8 Proposed 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

9 Proposed Pool 1	10 Proposed Pool 2
BLINEBRY OIL AND GAS	

11 Work Type Code	12 WellType Code	13 Rotary or C.T.	14 Lease Type Code	15 Ground Level Elevation
P	O	ROTARY	P	3486'
16 Multiple	**17 Proposed Depth**	**18 Formation**	**19 Contractor**	**20 Spud Date**
No	6790'	BLINEBRY		2/20/2006

21 Proposed Casing and Cement Program

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
NO CHANGE					

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. Describe the blowout prevention program, if any. Use additional sheets if necessary.

CHEVRON U.S.A. INC. INTENDS TO RECOMPLETE THE SUBJECT WELL FROM THE DRINKARD POOL TO THE BLINEBRY RESERVOIR.

A PIT WILL NOT BE USED FOR THIS PLUGBACK. A STEEL FRAC TANK WILL BE UTILIZED.

THE INTENDED PROCEDURE, AND CURRENT AND PROPOSED WELLBORE DIAGRAMS ARE ATTACHED FOR YOUR APPROVAL.

Permit Expires 1 Year From Approval
Date Unless ~~Drilling Underway~~
Plugback

23 I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature Denise Pinkerton
Printed Name Denise Pinkerton
Title Regulatory Specialist
Date 2/6/2006 Telephone 432-687-7375

OIL CONSERVATION DIVISION

Approved By:
Title: PETROLEUM ENGINEER
Approval Date: FEB 0 8 2006 Expiration Date:
Conditions of Approval:
Attached ☐

DeSoto/Nichols 3-94 ver 1.10

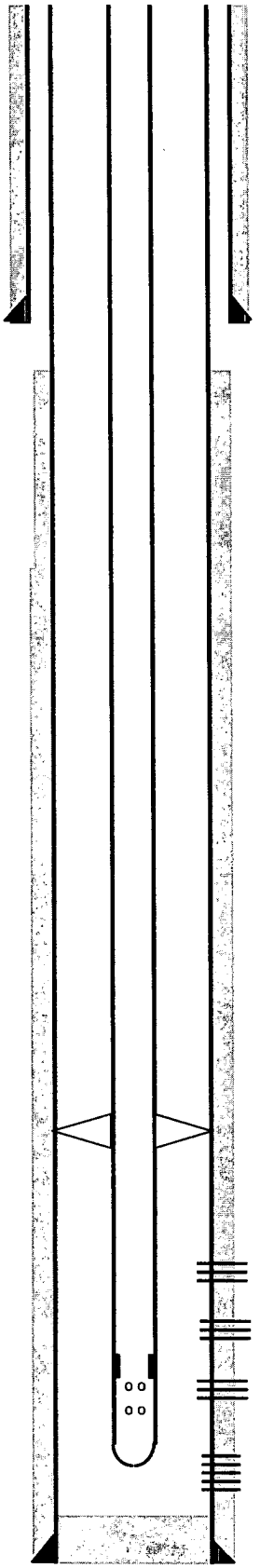
Well: **H. T. Mattern (NCT-B) # 20** Field: **Drinkard** Reservoir: **Drinkard**

Current
Wellbore Diagram

Location:
1980' FNL & 1961' FWL
Section: 31
Township: 21S
Range: 37E Unit: F
County: Lea State: NM

Elevations:
GL: 3486'
KB: 3500'
DF: 3499'

Well ID Info:
Chevno: EO6850
API No: 30-025-25129
L5/L6: U415000
Spud Date:10/6/75
Compl. Date:10/23/75



Surf. Csg: 8-5/8", 24#, K-55
Set: @ 1210' w/500 sx cmt
Size of hole: 11"
Circ: Yes **TOC:** Surface
TOC By: Circulated

Tubing Detail:

#Jts:	Size:	Footage
	KB Correction	14.00
199	Jts. 2 3/8" EUE 8R J-55 Tbg	6115.45
	TAC	2.93
16	Jts. 2 3/8" EUE 8R J-55 Tbg	487.55
	SN	1.10
	2 3/8" x 4' Perf Tbg Sub	3.87
1	Jt. 2 3/8" EUE 8R J-55 Tbg	29.65
	Bull Plug	0.50
216	**Bottom Of String >>**	**6655.05**

Perfs	Status
6496-98'	Drinkard - Open
6555-57'	Drinkard - Open
6597-99'	Drinkard - Open
6617-19'	Drinkard - Open
6656-58'	Drinkard - Open
6694-96'	Drinkard - Open

COTD: 6751'
PBTD: 6751'
TD: 6790'

Prod. Csg: 5-1/2", 15.5# K-55
Set: @ 6789' w/700 sx cmt
Size of hole: 7-7/8"
Circ: No **TOC:** 2289'
TOC By: Temperature Survey

Updated: 2/1/06

By: A. M. Howell

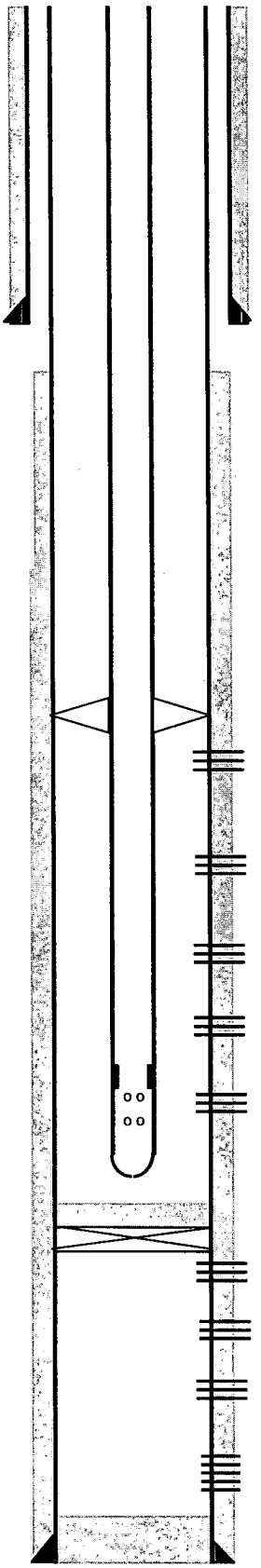
Well: **H. T. Mattern (NCT-B) # 20** Field: **Blinebry O&G** Reservoir: **Blinebry**

Proposed
Wellbore Diagram

Location:
1980' FNL & 1961' FWL
Section: 31
Township: 21S
Range: 37E Unit: F
County: Lea State: NM

Elevations:
GL: 3486'
KB: 3500'
DF: 3499'

Well ID Info:
Chevno: EO6850
API No: 30-025-25129
L5/L6: U460300
Spud Date:10/6/75
Compl. Date:10/23/75



Surf. Csg: 8-5/8", 24#, K-55
Set: @ 1210' w/500 sx cmt
Size of hole: 11"
Circ: Yes **TOC:** Surface
TOC By: Circulated

Tubing Detail:

#Jts:	Size:	Footage
	KB Correction	14.00
174	Jts. 2 7/8" EUE 8R J-55 Tbg	5394.00
	TAC	2.93
17	Jts. 2 7/8" EUE 8R J-55 Tbg	527.00
1	Jts. 2 7/8" EUE 8R J-55 IPC Tbg	31.00
	SN	1.10
	2 7/8" x 4' Perf Tbg Sub	3.87
1	Jt. 2 7/8" EUE 8R J-55 Tbg	29.65
	Bull Plug	0.50
193	**Bottom Of String >>**	6004.05

Perfs	Status
5488-96'	Blinebry - Open
5502-10'	Blinebry - Open
5520-26'	Blinebry - Open
5532-38'	Blinebry - Open
5542-48'	Blinebry - Open
5558-64'	Blinebry - Open
5588-96'	Blinebry - Open
5608-14'	Blinebry - Open
5618-24'	Blinebry - Open
5632-40'	Blinebry - Open
5650-58'	Blinebry - Open
5668-74'	Blinebry - Open
5678-84'	Blinebry - Open
5690-96'	Blinebry - Open
5716-24'	Blinebry - Open
5776-84'	Blinebry - Open
5836-44'	Blinebry - Open
5900-06'	Blinebry - Open
5936-44'	Blinebry - Open

CIBP @ 6450'
(35' cmt on top)

Perfs	Status
6496-98'	Drinkard - Open
6555-57'	Drinkard - Open
6597-99'	Drinkard - Open
6617-19'	Drinkard - Open
6656-58'	Drinkard - Open
6694-96'	Drinkard - Open

COTD: 6415'
PBTD: 6415'
TD: 6790'

Prod. Csg: 5-1/2", 15.5# K-55
Set: @ 6789' w/700 sx cmt
Size of hole: 7-7/8"
Circ: No **TOC:** 2289'
TOC By: Temperature Survey

Updated: 2/1/06

By: A. M. Howell

H. T. Mattern B # 20
Penrose Skelly Field
T21S, R37E, Section 31
Job: PB To Blinebry Formation, Acidize, And Frac

Procedure:

1. Displace flowline with fresh water. Have field specialist close valve at header. Pressure line according to the type of line. AGU, EMSU, and EMSUB buried fiberglass lines will be tested with 300 psi. All polypipe (SDR7 and SDR11) will be tested w/100 psi. All steel lines will be tested w/500 psi. If a leak is found, contact Donnie Ives for repair/replacement. If test is good, bleed off pressure and **open valve** at header. Document this process in the morning report.

2. MI & RU workover unit. Bleed pressure from well, if any. Pump down csg with 8.6 PPG cut brine water, if necessary to kill well. POH with rods and pump. Remove WH. Install BOP's and test to 1000 psi. POH LD 2 3/8" tbg string.

3. PU and GIH with 4 ¾" MT bit and 2 7/8" work string to 6475'. POH with work string and bit. LD bit.

4. PU and GIH with 5 ½" tbg-set CIBP to 6450'. Set CIBP at 6450'. Dump 35' cmt on top of CIBP. PUH to 6400'. Reverse circulate well clean from 6400' using 8.6 PPG cut brine water. Pressure test csg and CIBP to 500 psi. POH with 2 7/8" work string.

5. MI & RU Baker Atlas electric line unit. Install lubricator and test to 1000 psi. GIH and conduct GR/CBL/CCL log from 6400' up to 2600'. POH. Inspect logs for good cement bond from approximately 6200' up to 5300'. If bond does not appear to be good across proposed completion interval, discuss with Engineering before proceeding. Cmt squeeze as necessary to obtain good cmt across completion interval. GIH with 3 1/8" DP slick casing gun and perforate from 5488-96', 5502-10', 5520-26', 5532-38', 5542-48', 5558-64', 5588-96', 5608-14', 5618-24', 5632-40', 5650-58', 5668-74', 5678-84', 5690-96', 5716-24', 5776-84', 5836-44', 5900-06', and 5936-44' with 4 JSPF at 120 degree phasing, using 23 gram premium charges. POH. RD & release electric line unit. **Note: Use Welex Compensated Density Log dated 10/17/75 for depth correlation.**

6. PU and GIH w/ 5 ½" PPI pkr (with 10' element spacing) and SCV on 2 7/8" work string to approximately 5475'. Test tbg to 5500 psi while GIH.

7. MI & RU DS Services. Acidize perfs 5488-5944' with 3,800 gals anti-sludge 15% HCl acid * at a maximum rate **as shown below** and a maximum surface pressure of **4500 psi**. Spot acid across perfs at beginning of each stage and let soak to lower breakdown pressure and prevent communication. Pump job as follows:

Interval	Amt. Acid	Max Rate	PPI Setting
5936-44'	200 gals	½ BPM	5935-45'
5900-06'	200 gals	½ BPM	5898-5908'
5836-44'	200 gals	½ BPM	5835-45'
5776-84'	200 gals	½ BPM	5775-85'
5716-24'	200 gals	½ BPM	5715-25'
5690-96'	200 gals	½ BPM	5688-98'
5678-84'	200 gals	½ BPM	5677-87'
5668-74'	200 gals	½ BPM	5667-77'
5650-58'	200 gals	½ BPM	5649-59'
5632-40'	200 gals	½ BPM	5631-41'
5618-24'	200 gals	½ BPM	5617-27'
5608-14'	200 gals	½ BPM	5607-17'
5588-96'	200 gals	½ BPM	5587-97'
5558-64'	200 gals	½ BPM	5557-67'
5542-48'	200 gals	½ BPM	5541-51'
5532-38'	200 gals	½ BPM	5531-41'
5520-26'	200 gals	½ BPM	5518-28'
5502-10'	200 gals	½ BPM	5501-11'
5488-96'	200 gals	½ BPM	5487-97'

Displace acid with 8.6 PPG cut brine water -- do not overdisplace. Use a SCV to control displacement fluid. Record ISIP, 5 & 10 minute SIP's. RD and release DS services. **Note: Pickle tubing in 1 run of 500 gals acid, prior to acidizing perfs. Pickle acid is to contain only 1/2 gal A264 and 1 gal W53. Also, if communication occurs during treatment of any interval, monitor casing pressure and attempt to complete stage w/o exceeding 500 psi csg pressure. If cannot, then move PPI to next setting depth and combine treatment volumes of the intervals.**

* Acid system is to contain:	1 GPT A264	Corrosion Inhibitor
	8 GPT L63	Iron Control Agent
	2 PPT A179	Iron Control Aid
	20 GPT U66	Mutual Solvent
	2 GPT W53	Non-Emulsifier

8. Release PPI pkr and PUH to approximately 5475'. Swab back all intervals together. Recover 100% of treatment and load volumes before shutting well in for night, if possible. Report recovered fluid volumes, pressures, and/or swabbing fluid levels. **Note: Selectively swab perfs as directed by Engineering if excessive water is produced.**

9. Open well. Release PPI pkr. POH with tbg and PPI packer. LD PPI tool.

10. PU and GIH w/ 5 ½" Lok-Set pkr & On-Off tool w/ 2.25" "F" profile and 161 jts. of 3 ½" EUE 8R L-80 work string, testing to 8500 psi. Set pkr at approximately 5000'. Install frac head. Pressure annulus to 500 psi to test csg and pkr. Leave pressure on csg during frac job to observe for communication.

11. MI & RU DS Services and Tracer-Tech Services (Mike Mathis (866) 595-3115). Install casing saver. Frac well down 3 ½" tubing at **40 BPM** with 88,000 gals of YF130, 176,000 lbs. 16/30 mesh Jordan Sand, and 30,000 lbs **resin-coated** 16/30 mesh CR1630 proppant. Observe a maximum surface treating pressure of **8000 psi**. Tag frac with 2 radioactive isotopes (1 in main proppant stages, and 1 in resin-coated proppant stage). Pump job as follows:

    Pump 2,000 gals 2% KCL water containing 55 gals Baker RE 4777-SCW Scale Inhibitor
    Pump 1,000 gals 2% KCL water spacer
    Pump 14,000 gals YF130 pad containing 5 GPT J451 Fluid Loss Additive
    Pump 14,000 gals YF130 containing 0.5 PPG 16/30 mesh Jordan Sand & 5 GPT J451 FL Additive
    Pump 12,000 gals YF130 containing 1.5 PPG 16/30 mesh Jordan Sand
    Pump 12,000 gals YF130 containing 2.5 PPG 16/30 mesh Jordan Sand
    Pump 14,000 gals YF130 containing 3.5 PPG 16/30 mesh Jordan Sand
    Pump 16,000 gals YF130 containing 4.5 PPG 16/30 mesh Jordan Sand
    Pump 6,000 gals YF130 containing 5 PPG **resin-coated** 16/30 mesh CR1630 proppant.

    Flush to 5420' with 2,247 gals WF130. **Do not overflush.** Shut well in. Record ISIP, 5, 10, and 15 minute SI tbg pressures. SWI. RD & Release DS Services and Tracer-Tech Services. **Leave well SI overnight.**

12. Open well. GIH and swab well until there is no sand inflow. Report recovered fluid volumes, pressures, and/or swabbing fluid levels. Release pkr and POH with 3 ½" work string. Lay down 3 ½" work string and pkr.

13. PU and GIH with 4 ¾" MT bit on 2 7/8" work string to 6100'. If fill is found above 6100', clean out fill to 6400' using 8.6 PPG cut brine water and air unit (if necessary). POH with 2 7/8" work string and bit. LD bit.

14. PU & GIH with 5 ½" pkr on 2 7/8" work string to 5300'. Set pkr at 5300'. Open well. GIH and swab well until there is no sand inflow. Swab well for at least 3 hours before logging. MI & RU Baker Atlas electric line unit. Install lubricator and test to 1000 psi. GIH and conduct after-frac PRISM GR/Temp/CCL log from 6100' up to 5300'. POH. RD & release electric line unit. **Note: Correlate logs and run flat with Baker Atlas GR/CBL/CCL Log conducted in Step # 5.**

15. Release pkr. POH LD 2 7/8" work string and pkr.

16. PU and GIH w/ BP mud anchor jt of 2 7/8" tbg, 2 7/8" x 4' perforated sub, SN, 1 jt 2 7/8" EUE 8R J-55 IPC tbg, 17 jts 2 7/8" EUE 8R J-55 tbg, TAC, and 174 jts 2 7/8" EUE 8R J-55 tbg, testing to 5000 psi. Set TAC at 5400', with EOT at 6005' and SN at 5970'.

17. Remove BOP's and install WH. GIH with rods, weight bars, and pump per ALS recommended design. RD & release pulling unit.

18. Turn well over to production. Report producing rates, choke sizes, flowing pressures and/or fluid levels.

AMH
2/2/2006

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P.O. Box 1980, Hobbs, NM 88241-1980
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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-025-25129	6660	BLINEBRY OIL AND GAS (OIL)

4 Property Code	5 Property Name	6 Well No.
2682	H.T. MATTERN NCT-B	20

7 OGRID Number	8 Operator Name	9 Elevation
4323	CHEVRON USA INC	3486'

10 Surface Location

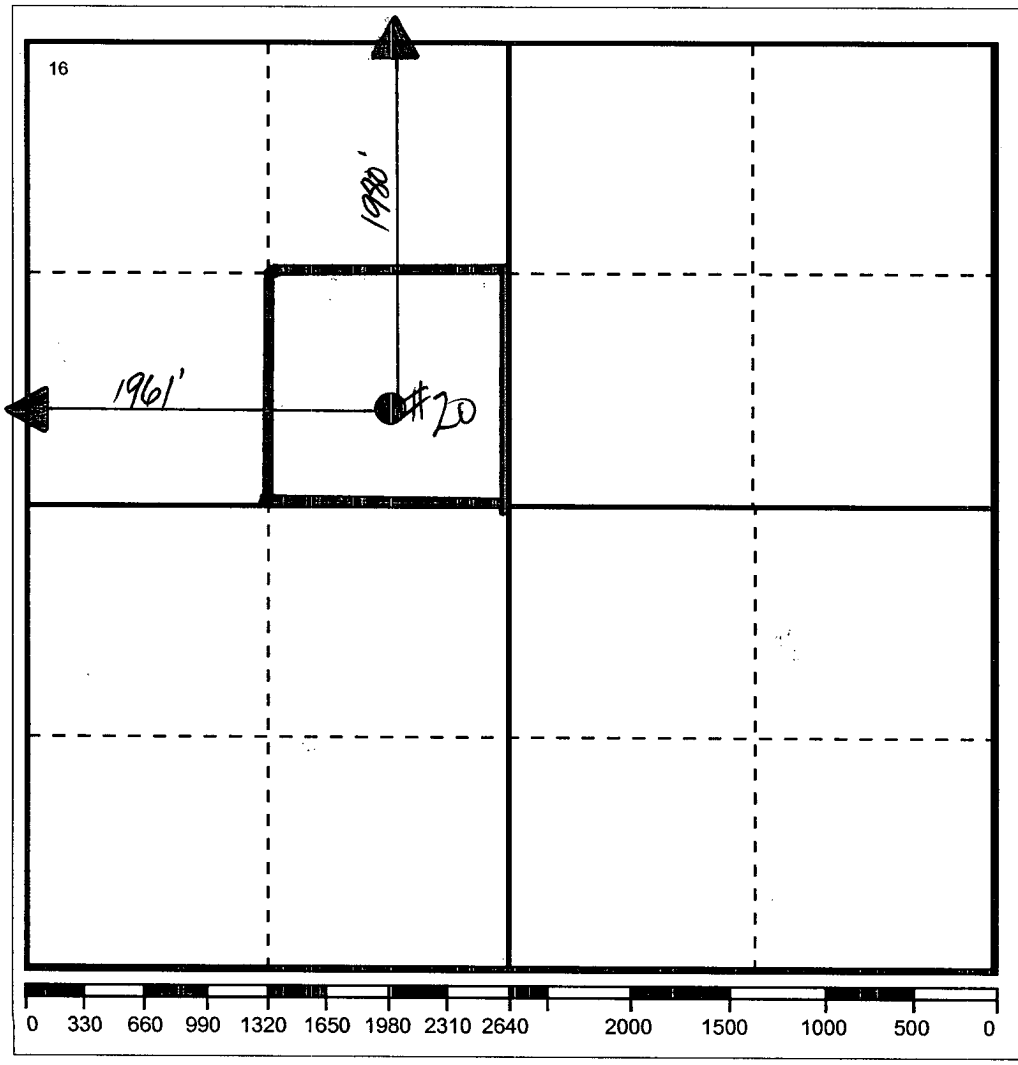
Ul or lot no	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
F	31	21-S	37-E		1980'	NORTH	1961'	WEST	LEA

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

12 Dedicated Acre	13 Joint or Infill	14 Consolidation Code	15 Order No.
40	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



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Signature: Denise Pinkerton

Printed Name: Denise Pinkerton

Positio: Regulatory Specialist

Date: 2/6/2006

18 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 knowledge and belief.

Date Surveyed

Signature & Seal of Professional Surveyor

Certificate No.

DeSoto/Nichols 3/94 ver 1.10