

Submit 3 Copies To Appropriate District  
Office  
District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Ave., Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM  
87505

State of New Mexico  
Energy, Minerals and Natural Resources

Form C-103  
May 27, 2004



OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

WELL API NO.	30-005-63825
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>	
6. State Oil & Gas Lease No.	
7. Lease Name or Unit Agreement Name Rusty Nail	
8. Well Number	1H
9. OGRID Number	5898
10. Pool name or Wildcat Wildcat; Wolfcamp Gas	

Pit or Below-grade Tank Application <input type="checkbox"/> or Closure <input type="checkbox"/>	
Pit type _____ Depth to Groundwater _____ Distance from nearest fresh water well _____ Distance from nearest surface water _____	
Pit Liner Thickness: _____ mil Below-Grade Tank: Volume _____ bbls; Construction Material _____	

**SUNDRIY NOTICES AND REPORTS ON WELLS**  
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

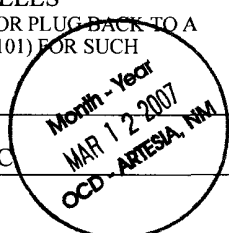
1. Type of Well: Oil Well ☐ Gas Well ☒ Other \_\_\_\_\_

2. Name of Operator  
DAVID H. ARRINGTON OIL & GAS INC

3. Address of Operator  
PO BOX 2071  
MIDLAND, TX 79702

4. Well Location  
Unit Letter M : 660 feet from the S line and 760 feet from the W line  
Section 12 Township 15S Range 25E NMPM County Chaves

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
3460'



12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ P AND A ☐  
CASING/CEMENT JOB ☐

OTHER: Change Location ☒

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Due to Geological reasons, plan to move BHL from N-S lateral (660' FNL & 760' FWL) to E-W lateral (760' FSL & 660' FEL).  
Enclosed are new: Amended C102, location & elevation verification map, proposed Wellbore diagram, drilling plan and proposed directional plan.  
Exisiting Permit will expire 5/8/07, we respectfully request an extension for one year from date.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Debbie Freeman TITLE ENGINEER TECH DATE 03/09/2007

Type or print name DEBBIE FREEMAN

E-mail address: DEBBIE@ARRINGTONOIL.COM Phone No. (432)682-6685

For State Use Only

**BRYAN G. ARRANT**

APPROVED BY: DISTRICT II GEOLOGIST TITLE \_\_\_\_\_

**MAR 13 2007**  
DATE \_\_\_\_\_

Conditions of Approval (if any): \_\_\_\_\_

DISTRICT I  
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State of New Mexico

Energy, Minerals, and Natural Resources Department

OIL CONSERVATION DIVISION

South St. Francis Dr.

Santa Fe, New Mexico 87505

Form C-102

Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 copies

Fee Lease - 3 copies

Month - Year  
MAR 12 2007  
OCD - ARTESIA, NM

☒ AMENDED REPORT

### WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-005-43825	<sup>2</sup> Pool Code 97489	<sup>3</sup> Pool Name wildcat, wilfcamp Gas
<sup>4</sup> Property Code 35584	<sup>5</sup> Property Name RUSTY NAIL	<sup>6</sup> Well Number 1H
<sup>7</sup> OGRID No. 5898	<sup>8</sup> Operator Name DAVID H. ARRINGTON OIL & GAS	<sup>9</sup> Elevation 3460'

#### <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
M	12	15 SOUTH	25 EAST, N.M.P.M.		660'	SOUTH	760'	WEST	CHAVES

#### <sup>11</sup> Bottom Hole Location If Different From Surface

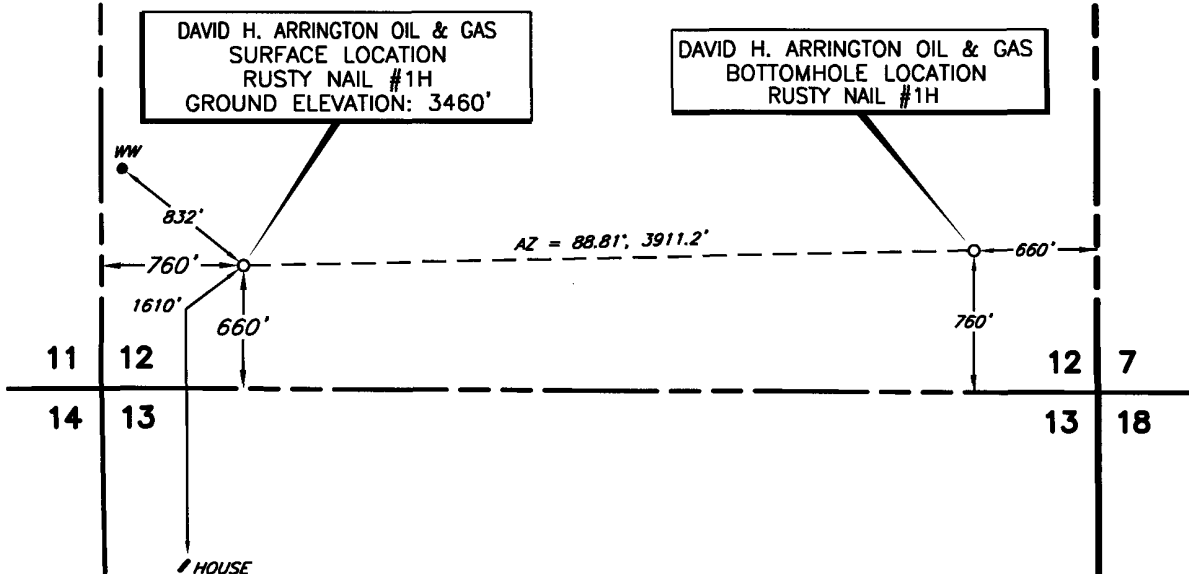
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	12	15 SOUTH	25 EAST, N.M.P.M.		760'	SOUTH	660'	EAST	CHAVES

<sup>12</sup> Dedicated Acres 320	<sup>13</sup> Joint or Infill —	<sup>14</sup> Consolidation Code —	<sup>15</sup> Order No.
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NO ALLOWABLE WELL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<b>17 OPERATOR CERTIFICATION</b> <i>I hereby certify that the information contained 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 a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i>  Signature: <i>Debbie Freeman</i> Date: 3/9/07 Printed Name: Debbie Freeman
	<b>18 SURVEYOR CERTIFICATION</b> <i>I hereby certify that the well location shown on this plat was plotted from field notes of a duly licensed surveyor or under my supervision, and that the same is true and correct to the best of my belief.</i>  Date of Survey: DECEMBER 27, 2006 Signature and Seal of Professional Surveyor: <i>V. L. Bezner</i> Certificate Number: V. L. BEZNER R.P.S. #7920 JOB # 119734 / 125 SW / E.U.O.

SECTION 12, TOWNSHIP 15 SOUTH, RANGE 25 EAST, N.M.P.M.,  
CHAVES COUNTY NEW MEXICO

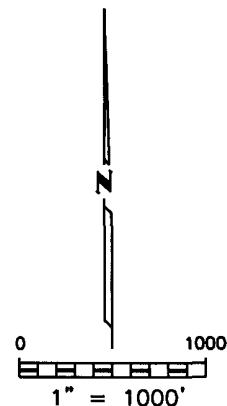


DATE OF FIELD WORK: DECEMBER 27, 2006

I, V. L. BEZNER, A PROFESSIONAL SURVEYOR IN THE STATE OF NEW MEXICO AND AUTHORIZED AGENT OF TOPOGRAPHIC LAND SURVEYORS, HEREBY CERTIFY THIS PLAT TO BE A TRUE REPRESENTATION OF A SURVEY PERFORMED IN THE FIELD UNDER MY SUPERVISION, THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND THAT THIS PLAT AND FIELD SURVEY UPON WHICH IT IS BASED MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO. (RULE 500.6/EASEMENT SURVEYING)



V. L. BEZNER, P.S. NO. 7920



BEARINGS AND COORDINATES  
BASED ON NEW MEXICO  
STATE PLANE GRID - EAST  
ZONE, NAD 27

**DAVID H. ARRINGTON OIL & GAS, INC.**

NO.	REVISION	DATE	BY

SURVEYED BY: A.M.

DRAWN BY: E.U.O.

APPROVED BY: V.L.B.

SURVEYING AND MAPPING BY  
**TOPOGRAPHIC LAND SURVEYORS**  
MIDLAND, TEXAS

SCALE: 1" = 1000'

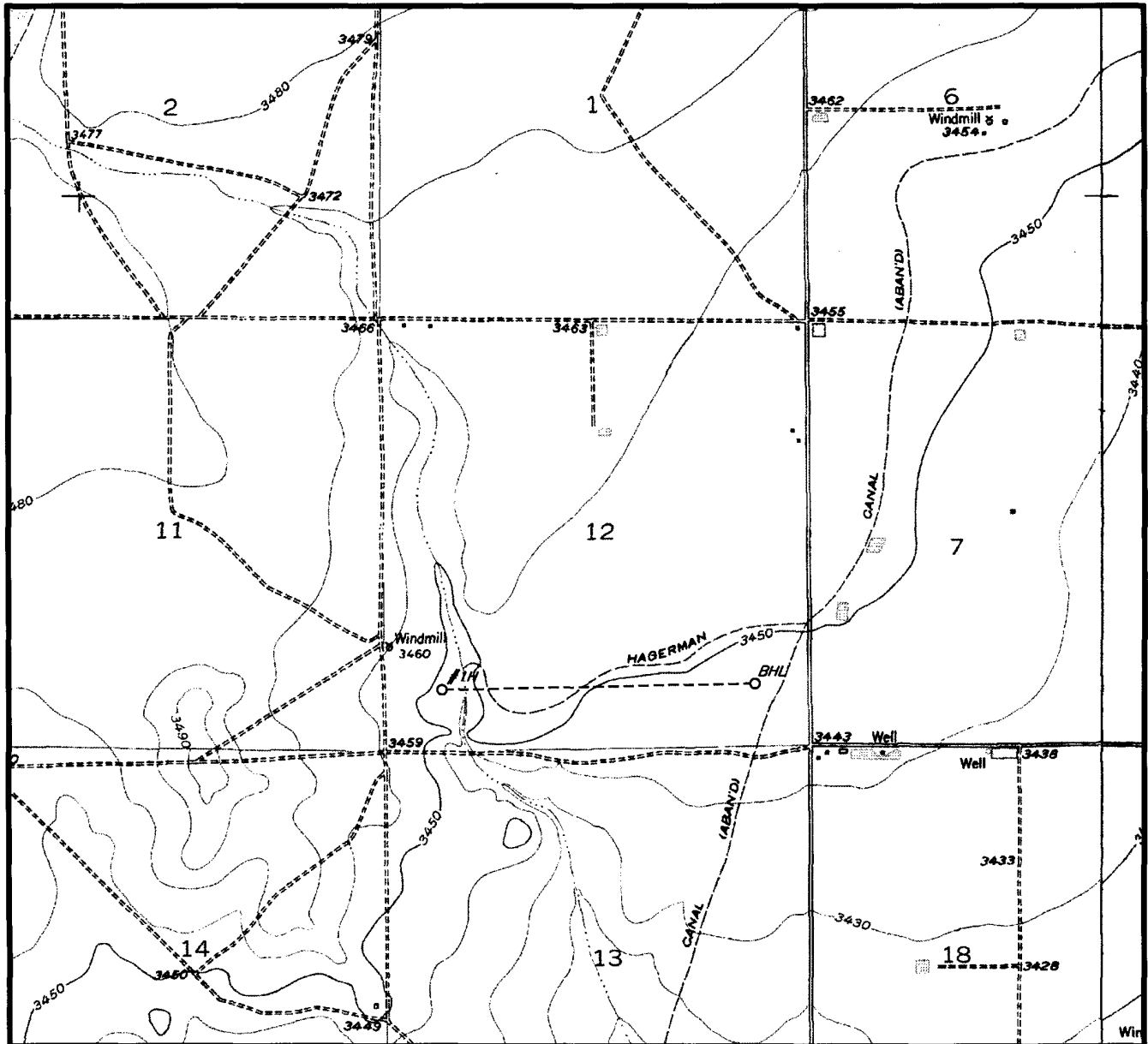
DATE: DECEMBER 27, 2006

JOB NO.: 119734-2

QUAD NO.: 125 SW

SHEET : 1 OF 1

# LOCATION & ELEVATION VERIFICATION MAP



SCALE : 1" = 2000'

CONTOUR INTERVAL 10'

SECTION 12 TWP 15-S RGE 25-E

SURVEY NEW MEXICO PRINCIPAL MERIDIAN

COUNTY CHAVES STATE NM

DESCRIPTION 660' FSL & 760' FWL

ELEVATION 3460'

OPERATOR DAVID H. ARRINGTON OIL & GAS

LEASE RUSTY NAIL #1H

U.S.G.S. TOPOGRAPHIC MAP

HAGERMAN SW, NEW MEXICO

SCALED LAT. LAT.: N 33.0249895

LONG. LONG.: W 104.4036935



## TOPOGRAPHIC LAND SURVEYORS

*Surveying & Mapping for the Oil & Gas Industry*

2903 N. BIG SPRING  
MIDLAND, TX. 79705  
(800) 767-1653



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MIDLAND, TX. 79705  
(800) 767-1653

David H. Arrington Oil & Gas Inc.  
Rusty Nail 1H  
SHL - 660' FSL & 760' FWL  
BHL - 760' FSL & 660' FEL  
S12, T15S, R25E  
Chaves County, NM

1. Ground elevation above sea level: 3460'
2. Proposed drilling depth: 5200' TVD
3. Estimated tops of geological markers:

Tubb	3250'
Abo Shale	3950'
Abo Carbonate	4240'
Wolfcamp	4865'
Wolfcamp Shale	5030'

4. Possible mineral bearing formations:

Abo/Wolfcamp      Gas/Oil

5. Casing Program

<u>Hole size</u>	<u>Interval</u>	<u>OD of Casing</u>	<u>Weight</u>	<u>Thread</u>	<u>Grade</u>	<u>TOC</u>
12-1/4"	40' - 1300'	8-5/8"	32#	LTC	J55	Surf
7-7/8"	1300' - 8642'	5-1/2"	17#	LTC	I80	Surf

Drill 7-7/8" vertical pilot hole to ~5200'. Plug back to ~ 4513' w/ open hole whipstock and build 15° BUR curve section landing at ~ 4895' TVD. Drill ahead to a total measured depth of ~ 8642'. Run 5-1/2" production string to TD and cement to surface.

6. Cementing and Setting Depth

<u>String</u>	<u>Depth</u>	<u>Sks</u>	<u>Slurry</u>	
8-5/8" Surface	1300'	490	Lead:	Light C (65:35:6) w/ 5 pps gilsonite, 3% salt & 2% CaCl <sub>2</sub> (12.4 / 2.06)
		200	Tail:	C w/ 2% CaCl <sub>2</sub> (14.8 / 1.34)
5-1/2" Production	8642'	590	Lead:	Interfill C w/ 1/8# pps Poly-E-Flake (11.9 / 2.45)
		340	Tail:	Howco Acid Soluble Cement w/ 10# silicalite 50/50 blend, 0.5% Halad 344, 0.2% HR-601 & 0.25 pps D-Air 3000 (14.8 / 2.68)

If necessary, will run a temperature survey and 1" to surface with C w/ 2% CaCl<sub>2</sub>.

Both casing strings will be cemented to surface.

7. Pressure Control Equipment: After setting 8-5/8" casing and installing 3000 psi casing head, NU 11" 5000 psi double ram BOP and 3000 psi annular BOP, and test with clear fluid to 3000 psi using 3<sup>rd</sup> party testers.

## 8. Proposed Mud Circulating System

Interval	Mud Wt.	Visc.	FL	Type Mud System
40' - 1300'	8.5 - 8.6	32 - 38	NC	Fresh water gel/lime slurry. Add paper for seepage. If losses occur, utilize 15-25 lb/bbl LCM. If necessary, spot LCM pill for losses. If not regained, dry drill to depth.
1300' - 5200'	8.4 - 9.3	28 - 34	NC-12	Fresh water-cut brine. Drill out w/ fresh water using paper and high viscosity sweeps for seepage and hole cleaning. At ~ 3,800' add brine to mud. Mud up at ~4,750' utilizing starch/PAC system.
4513' - 8642'	8.8 - 9.3	32 - 50	15	Utilize existing cut brine system adding XCD polymer for viscosity and white starch for fluid loss control. Sweep as necessary for hole cleaning.

### Proposed Drilling Plan:

Drill 12-1/4" surface hole to 1300'. Run 8-5/8" and cement to surface.

Drill 7-7/8" vertical pilot hole to ~5200'. Plug back to ~ 4513' w/ open hole whipstock and build 15° BUR curve section landing at ~ 4895' TVD. Drill ahead to a total measured depth of ~ 8642'. Run 5-1/2" production string to TD and cement to surface.

**Rusty Nail 1H  
Cottonwood Creek Field  
Chaves County, New Mexico**

**Surface**      **Lateral Terminus**

**660' FSL**      **760' FSL**

**760' FWL**      **660' FEL**

**S-12**

**T15S, R25E**

**Proposed Wellbore**

**API: 30-005-63825**

**KB: 3479'**

**GL: 3460'**

**Bit Size: 12-1/4"**

**8-5/8" 32# J55 LTC @ 1300'**

w/ 490 sx Light C (65:35:6) w/ 5 pps gilsonite, 3% salt  
& 2% CaCl<sub>2</sub> (12.4 / 2.06) and  
200 sx C w/ 2% CaCl<sub>2</sub> (14.8 / 1.34)

**Assumed 100% WO gauge hole + 100 sx Lead**

**Tubb @ 3250'**

**Abo Shale @ 3950'**

**Bit Size: 7-7/8"**

**Abo Carb @ 4240'**

**KOP: 4513'**

**15° BUR**

**Smith OH Whipstock @ ~ 4505' - 4520'**  
Window: 4505' - 4513'

**Wolfcamp @ 4865'**  
**Land @ 4895'**

**Wolfcamp Shale @ 5030'**

**Vertical TD: 5200'**

**EOC @ 5113'**

**88.81° Az  
3911.2' VS**

**EOL @ 8642'**

**Bit Size: 7-7/8"**

**5-1/2" 17# I80 LTC @ 8642'**

w/ 590 sx Interfill C w/ 1/8# pps Poly-E-Flake (11.9 / 2.45) and  
340 sx Howco Acid Soluble Cement w/ 10# silicalite 50/50 blend,  
0.5% Halad 344, 0.2% HR-601 & 0.25 pps D-Air 3000 (14.8 / 2.68)  
**Cement Circulated (Assumed 8.75" AHS + 100 sx lead)**

**MEE: 03/09/07**



# Patterson Rig 624 Location Layout w/ Frac Pit

