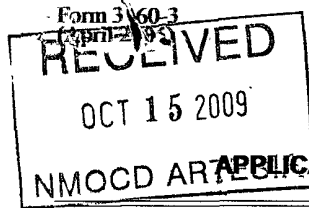


09-1001

ATS-09-510 RA



OCD Artesia

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

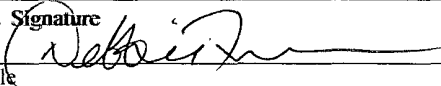
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM 103591	
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name	
2. Name of Operator DAVID H. ARRINGTON OIL & GAS INC		7. If Unit or CA Agreement, Name and No.	
3a. Address PO BOX 2071 MIDLAND, TX 79702		8. Lease Name and Well No. Green Wooley Booger Fed "5" #2	
3b. Phone No (include area code) (432) 682-6685		9. API Well No. 30-015- 37344	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 898' FSL & 1952' FEL At proposed prod. zone		10. Field and Pool, or Exploratory Hoag Tank (Morrow)	
14. Distance in miles and direction from nearest town or post office* 13 Miles SW of Artesia		12. County or Parish Eddy	13. State NM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 898' FSL	16. No. of acres in lease 320	17. Spacing Unit dedicated to this well 320	
18. Distance from proposed location* to nearest well, drilling completed, applied for, on this lease, ft. 2849' Plugged	19. Proposed Depth 9000'	20. BLM/BIA Bond No. on file BLM 104312789 - NM 2503	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) GL 3782'	22. Approximate date work will start* 11/01/2009	23. Estimated duration 30 days	
24. Attachments			

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- | | |
|---|--|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature 	Name (Printed/Typed) DEBBIE FREEMAN	Date 08/24/2009
Title ENGINEER TECH		
Approved by (Signature) /s/ Don Peterson	Name (Printed/Typed)	Date OCT 13 2009
Title 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 YEARS

Title 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)

Roswell Controlled Water Basin

Approval Subject to General Requirements
& Special Stipulations Attached

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Statement Accepting Responsibility for Operations

David H. Arrington Oil & Gas, Inc.

PO Box 2071

Midland, TX 79702

The undersigned accepts all applicable terms, conditions, stipulations and restrictions concerning operations conducted on the leased land or portion thereof, as described below:


Lease Name & Well Number: Green Wooley Booger Fed 5

Lease No.: NM 103591

Legal Description of land: Sec 5, T19, R24E

Formation: Morrow

Bond Coverage: \$25,000 – NM-2503, BLM 104312789

Authorized Signature: 

Printed Name: ART CARRASCO

Title: SR. COMPLETION ENGINEER

Date: 24 August 2009

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240

DISTRICT II
1301 W. Grand Avenue, 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 Department

OIL CONSERVATION DIVISION

1220 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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-37344	² Pool Code 78550 70460	³ Pool Name Hag Tank (monow)	⁴ Property Code 1581	⁵ Property Name GREEN WOOLEY BOOGER FEDERAL "5"	⁶ Well Number 2
⁷ GRID No. 5898	⁸ Operator Name DAVID H. ARRINGTON OIL & GAS, INC.			⁹ Elevation 3782'	

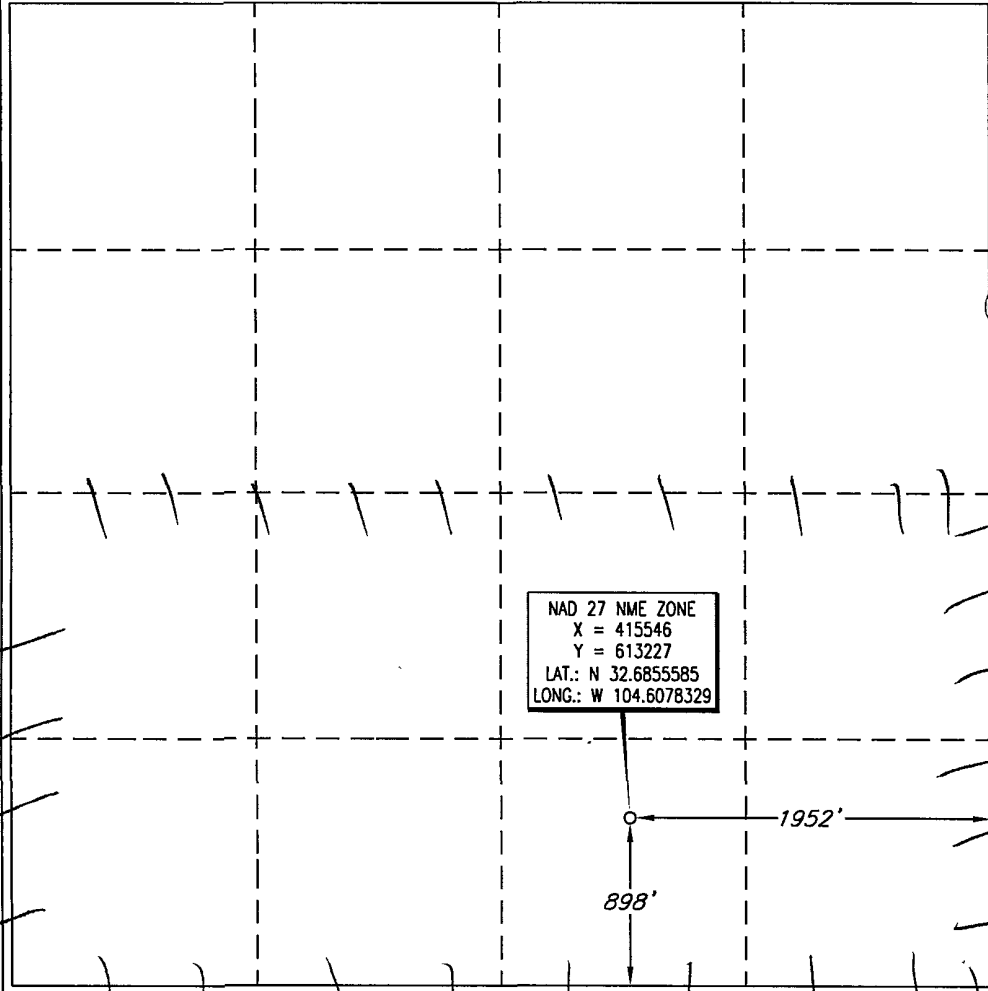
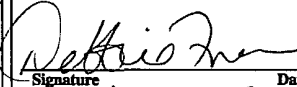
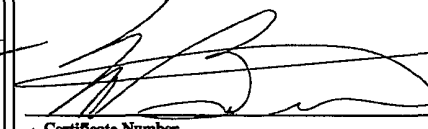
¹⁰ Surface Location

UL or lot no. 0	Section 5	Township 19 SOUTH	Range 24 EAST, N.M.P.M.	Lot Idn	Feet from the 898'	North/South line SOUTH	Feet from the 1952'	East/West line EAST	County EDDY
--------------------	--------------	----------------------	----------------------------	---------	-----------------------	---------------------------	------------------------	------------------------	----------------

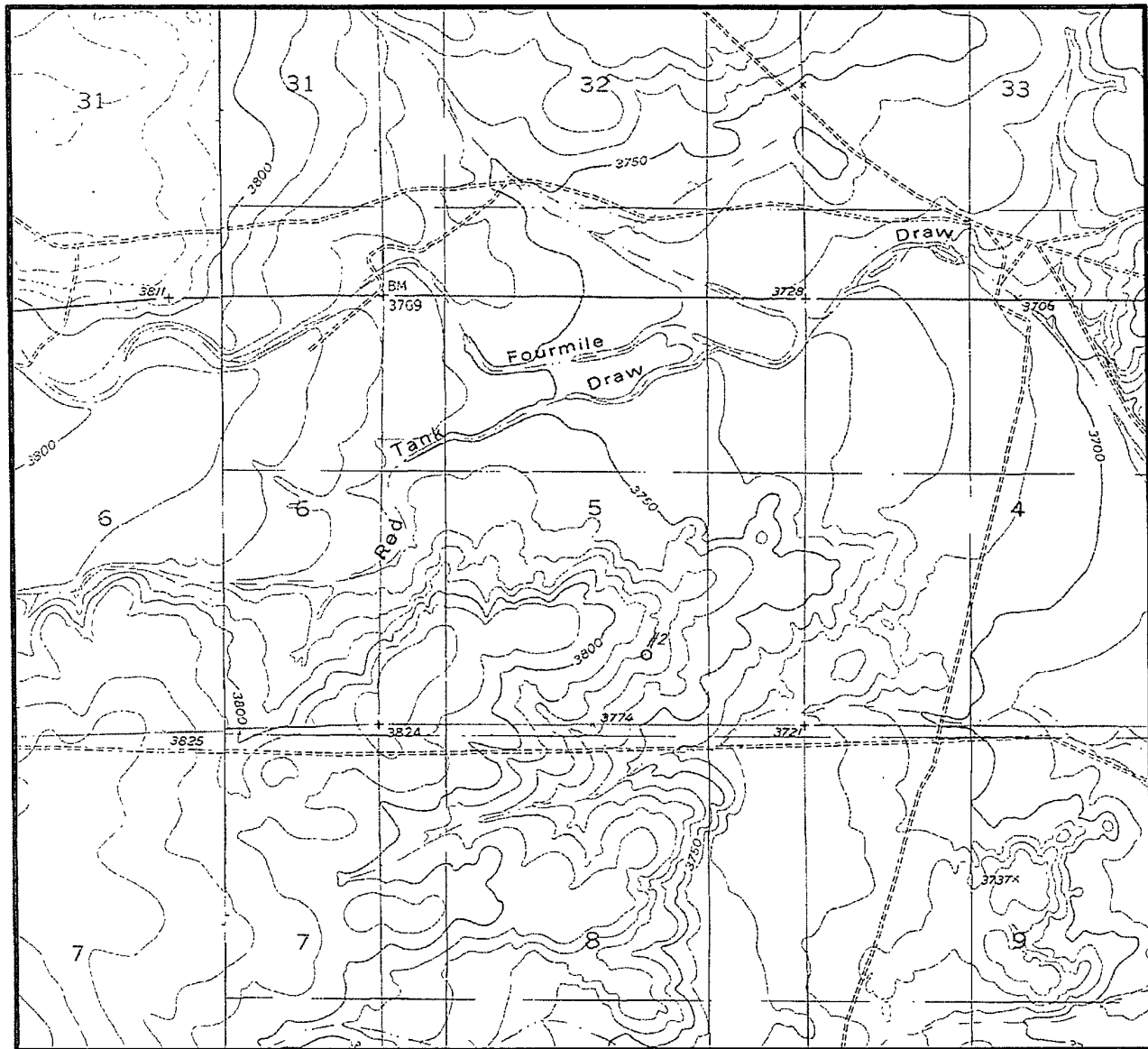
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres 320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.						

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

	<p>¹⁷ OPERATOR CERTIFICATION</p> <p>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.</p> <p> 8/25/09 Signature Date Debbie Freeman Printed Name</p> <p>¹⁸ SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was placed on the field notes of a survey made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>18329 AUGUST 12, 2009 Date of Survey Signature and Seal of Professional Surveyor</p> <p> Certificate Number Michael Blake Brown P.S. #18329 JOB # 148868 / 76 NE / E.U.O.</p>
---	--

LOCATION & ELEVATION VERIFICATION MAP



SCALE : 1" = 2000'

CONTOUR INTERVAL 10'

SECTION 5 TWP 19-S RGE 24-E

SURVEY NEW MEXICO PRINCIPAL MERIDIAN

COUNTY EDDY STATE NM

DESCRIPTION 898' FSL & 1952' FEL

ELEVATION 3782'

OPERATOR DAVID H. ARRINGTON OIL & GAS, INC.

LEASE GREEN WOOLEY BOOGER FEDERAL "5" #2

U.S.G.S. TOPOGRAPHIC MAP

HOPE NE, NEW MEXICO

SCALED LAT. LAT.: N 32.6855585

LONG. LONG.: W 104.6078329

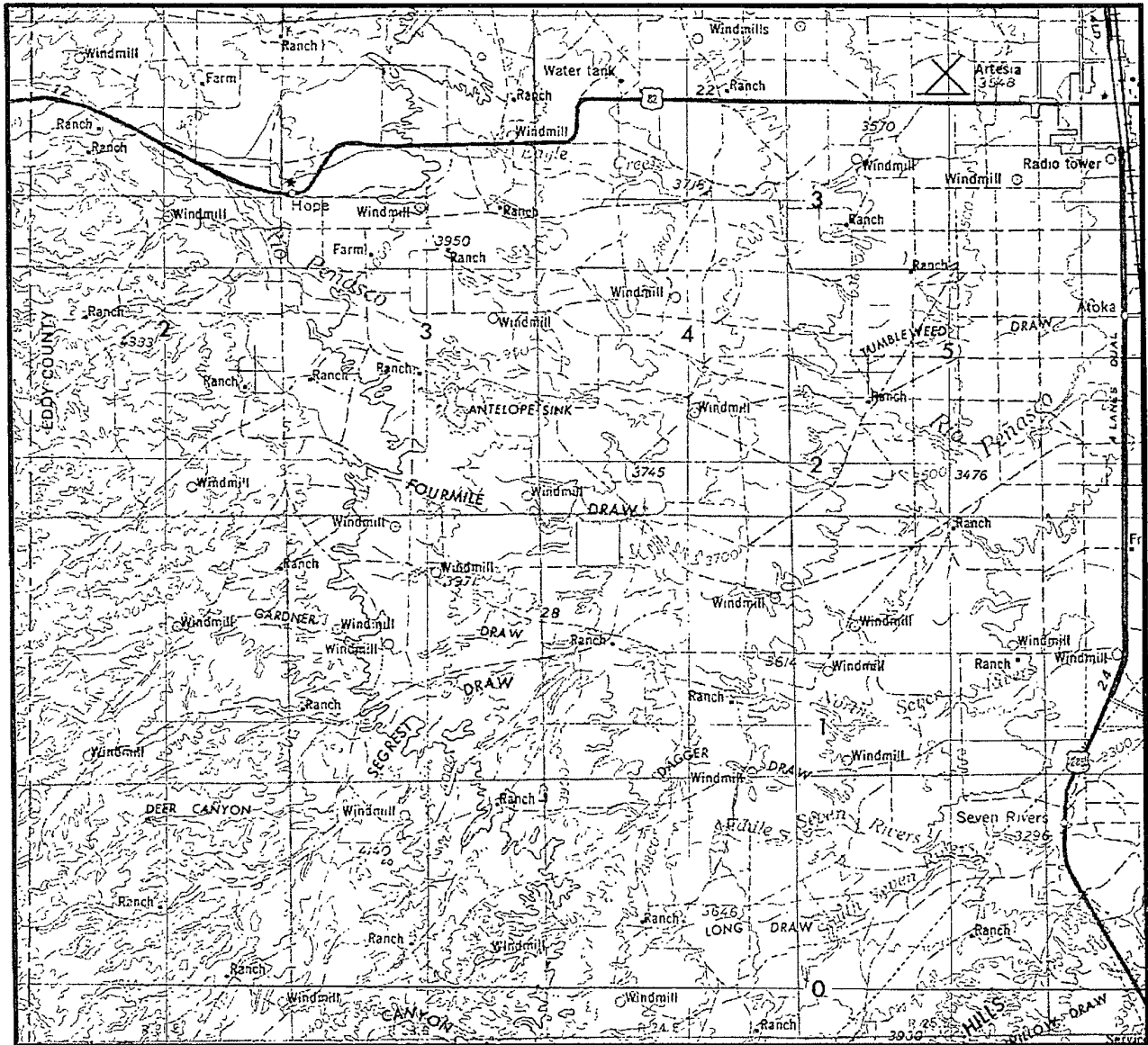


TOPOGRAPHIC LAND SURVEYORS

Surveying & Mapping for the Oil & Gas Industry

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

VICINITY MAP



SECTION 5 TWP 19-S RGE 24-E
 SURVEY NEW MEXICO PRINCIPAL MERIDIAN
 COUNTY EDDY STATE NM
 DESCRIPTION 898' FSL & 1952' FEL

OPERATOR DAVID H. ARRINGTON OIL & GAS, INC.
 LEASE GREEN WOOLEY BOOGER FEDERAL "5" #2

DISTANCE & DIRECTION FROM ARTESIA GO SOUTH ON HWY.
285 12.0 MILES, THENCE WEST 12.0 MILES ON CO. RD. 21
THENCE NORTH 1.6 MILES, THENCE WEST 0.8 MILES TO A
POINT ±900' SOUTHWEST OF THE LOCATION.



TOPOGRAPHIC LAND SURVEYORS

Surveying & Mapping for the Oil & Gas Industry

This location has been very carefully staked on the ground according to the best official survey records, maps, and other data available to us.

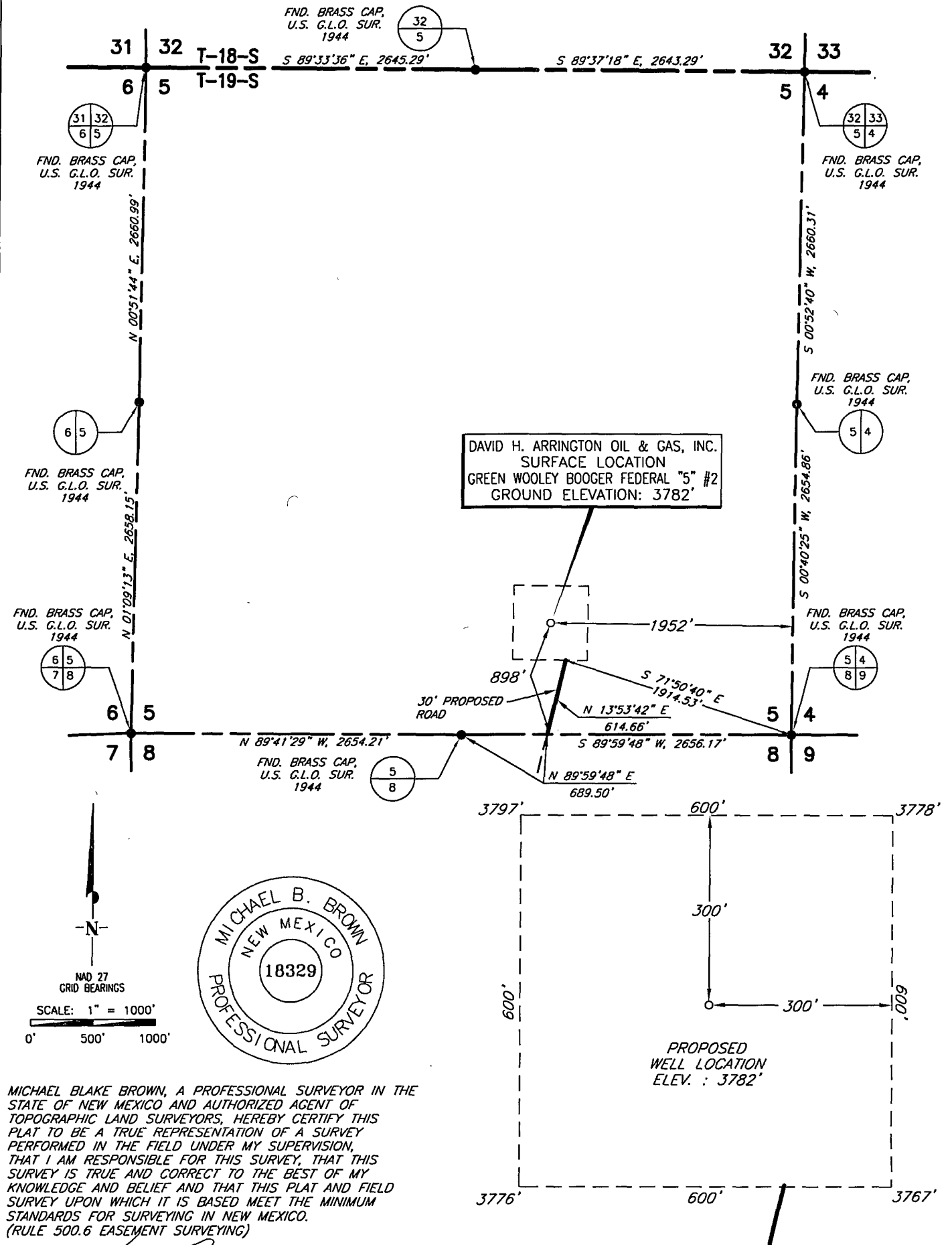
Review this plot and notify us immediately of any possible discrepancy.

1307 N. HOBART
 PAMPA, TX. 79065
 (800) 658-6382

6709 N. CLASSEN BLVD.
 OKLAHOMA CITY, OK. 73116
 (800) 654-3219

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

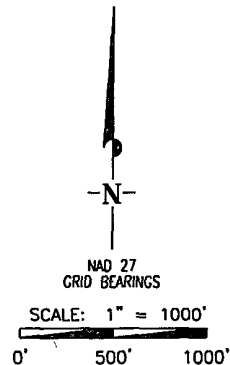
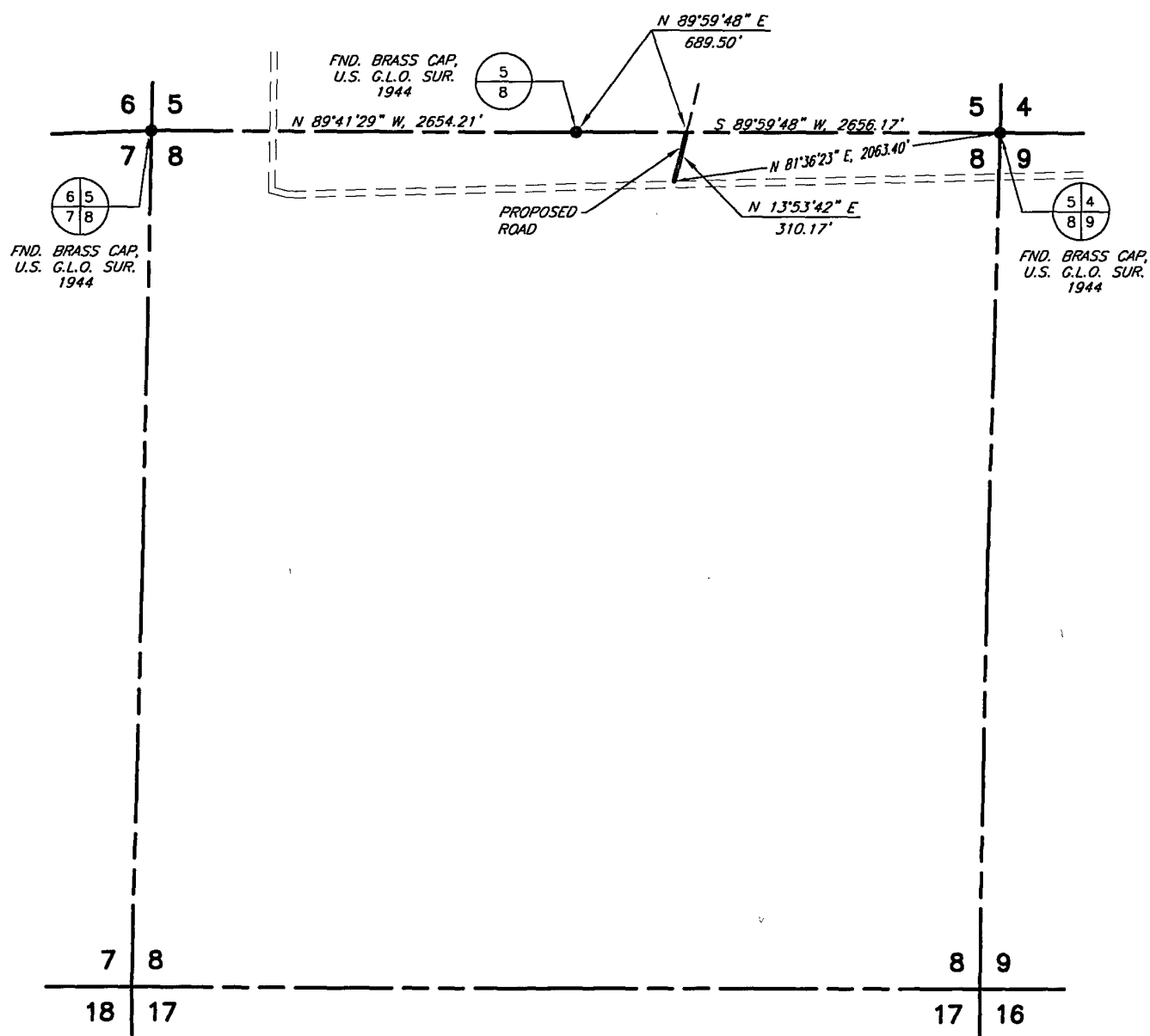
PLAT SHOWING PROPOSED WELL LOCATION IN
SECTION 5, T-19-S, R-24-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO



MICHAEL BLAKE BROWN, P.S. NO. 18329

				DAVID H. ARRINGTON OIL & GAS, INC.	SCALE: 1" = 1000'
					DATE: AUGUST 12, 2009
NO.	REVISION	DATE	BY		JOB NO.: 148868-F
SURVEYED BY: C.M.				SURVEYING AND MAPPING BY TOPOGRAPHIC LAND SURVEYORS MIDLAND, TEXAS	QUAD NO.: 76-NE
DRAWN BY: E.U.O.					SHEET : 1 OF 2
APPROVED BY: M.B.B.					

PLAT SHOWING PROPOSED WELL LOCATION IN
SECTION 8, T-19-S, R-24-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO



MICHAEL BLAKE BROWN, 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)

MICHAEL BLAKE BROWN, P.S. NO. 18329

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

DATE OF FIELD WORK: AUGUST 12, 2009

				DAVID H. ARRINGTON OIL & GAS, INC.	SCALE: 1" = 1000'
					DATE: AUGUST 12, 2009
NO.	REVISION	DATE	BY		JOB NO.: 148868-F2
SURVEYED BY: C.M.				SURVEYING AND MAPPING BY TOPOGRAPHIC LAND SURVEYORS MIDLAND, TEXAS	QUAD NO.: 76-NE
DRAWN BY: E.U.O.					
APPROVED BY: M.B.B.					SHEET : 2 OF 2

DRILLING PLAN

David H. Arrington Oil & Gas, Inc.
Green Wooley Booger Fed 5 #2
SHL 898' FSL & 1952' FEL
S5, T19S, R24E
Eddy County, NM

Ground elevation above sea level: 3782'

1. Proposed drilling depth: 9000' TVD

2. Estimated tops of geological markers:

San Andreas	350'
Glorietia	1680'
Tubb	3070'
Abo Shale	3725'
Wolfcamp	4880'
Atoka	7850'
Morrow	8260'
Chester	8575'
Miss	8625'
TD	9000'

3. Possible mineral bearing formations:

Abo/Wolfcamp	Gas/Oil
Cisco	Gas
Morrow	Gas

4. Casing Program

Hole		Casing					Design Factor		
Interval	Size	Size	Weight	Thread	Grade		Collapse	Burst	Tension
0' - 40'	20"	16"	65#	BTC	H40	Used	NA	NA	NA
40' - 1400'	12 1/4"	8 5/8"	32#	LTC	J55	New	4.13	3.86	2.88
1400' - 9000'	7 7/8"	5 1/2"	17#	LTC	N80	New	1.49	2.19	1.60

Drill 20" hole to ~40'. Run 16" conductor string to TD and cement to surface

Drill 12 1/4" hole to ~1400'. Run 8 5/8" ~~intermediate~~ string to TD and cement to surface.

Drill 7-7/8" hole to ~9000'. Run 5-1/2" production string to TD and cement to surface in two stages.

Surface casing

conductor is not surface casing

5. Cementing and Setting Depth See COA

All cement volumes could be revised pending measurements from fluid or open hole calipers.

If necessary, we will run a temperature survey on the surface casing and 1" to surface with Class C Cement w/ 2% CaCl₂.

Surface - 1,400' 8 5/8"

Stage		Sacks	Cement	Additives	Weight	Yield
1	Lead	425	Light C (65:35:6)	1/4#/sx Flocele, 2% CC	12.4 #/gal	2.06 ft ³ /sx
	Tail	250	C	2% CC	14.8 #/gal	1.34 ft ³ /sx

Production - 9,000' 5-1/2" w/DV Tool @ ± 7000'

Stage		Sacks	Cement	Additives	Weight	Yield
1	Tail	425	50/50 Pozmix	0.5% LAP-1, 5#/sx Gilsonite 0.2% CFR-3, ¼ #/sx D-AIR 3000	14.2 #/gal	1.24 ft³/sx
2	Tail	750	50/50 Pozmix	0.5% LAP-1, 5#/sx Gilsonite 0.2% CFR-3, ¼ #/sx D-AIR 3000	14.2 #/gal	1.24 ft³/sx
2	Lead	450	Light C (65:35:6)	1/4#/sx Flocele	12.4 #/gal	2.06 ft³/sx

6. Pressure Control Equipment:

- Surface will be drilled with a bag type (Hydril) preventor.
- After setting 8-5/8" surface, the blow out preventor equipment will consist of a 5000 psi double ram BOP and 3000 psi annular BOP. Both units will be hydraulically operated and the ram type preventor will be equipped with blind rams on top and 4 ½" drill pipe rams on bottom.
- Prior to drilling out the 8 5/8" casing shoe, the BOP's and Hydril will be tested with clear fluid to 3000 psi using 3rd party testers.
- Other accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines, and choke manifold having 5000 psi WP rating.

7. Proposed Mud Circulating System

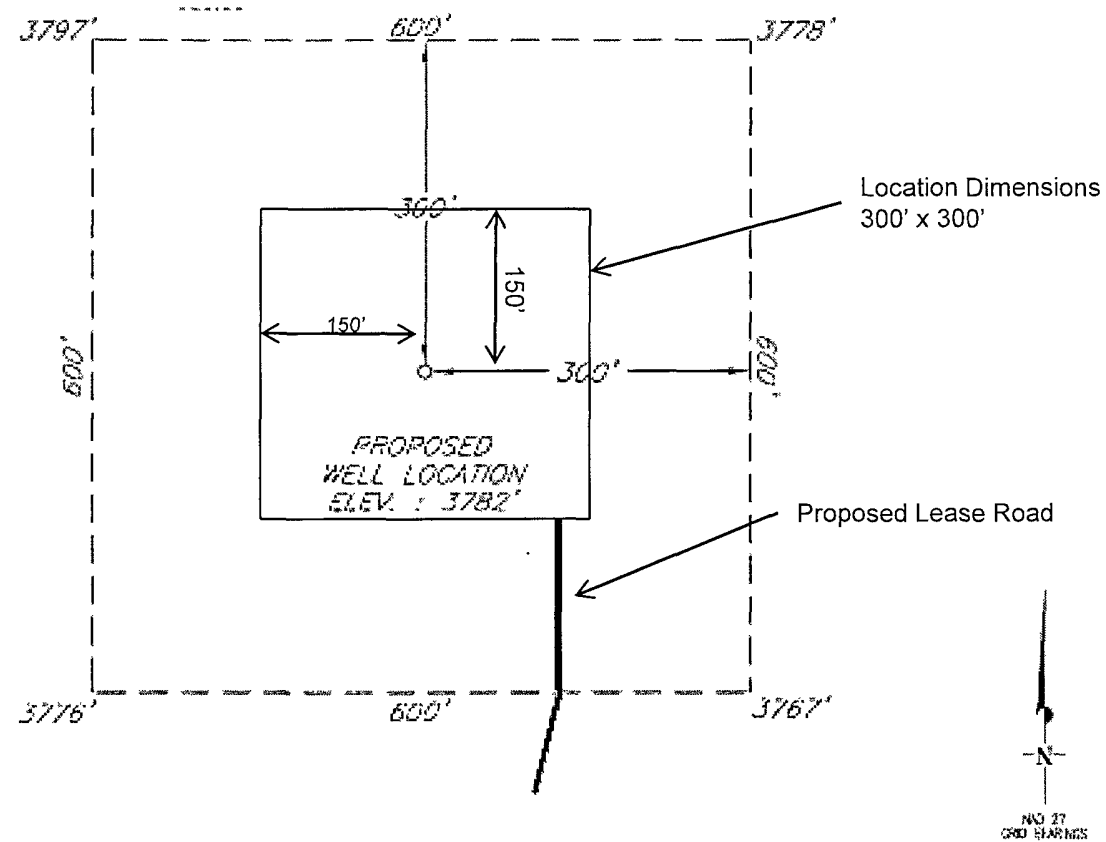
Interval	Mud Weight	Viscosity	Fluid Loss	Mud System
40' - 1400'	8.5 - 8.6	32-38	NC	Fresh water gel/lime slurry. Add paper for seepage. If losses occur, utilize 15-25 lb/bbl LCM. If necessary, spot LCM pill for losses. If not regained, dry drill to depth.
1400' - 1900'	8.4 - 9.3	28 - 38	NC - 12	Fresh water-cut brine. Drill out w/ fresh water using paper and high viscosity sweeps for seepage and hole cleaning. At ~3,500' add brine and mud up utilizing starch/PAC system. Add XCD polymer for viscosity and white starch for fluid loss control. Sweep as necessary for hole cleaning.

8. Logging, Coring, and Testing Program See CoA

- Drill stem tests will be based on geological sample shows. (none anticipated)
 - If a drill stem test is anticipated, a procedure, equipment to be used, and safety measures will be provided via sundry notice to the BLM
 - No coring program is planned.
 - Open hole logging
 - Total depth to surface
 - Total depth to Intermediate casing
- Compensated Neutron w/ Gamma Ray
Dual Laterolog-Micro Laterolog w/SP and Gamma Ray
Z Density w/Gamma Ray and Caliper
Compensated Neutron w/Gamma Ray

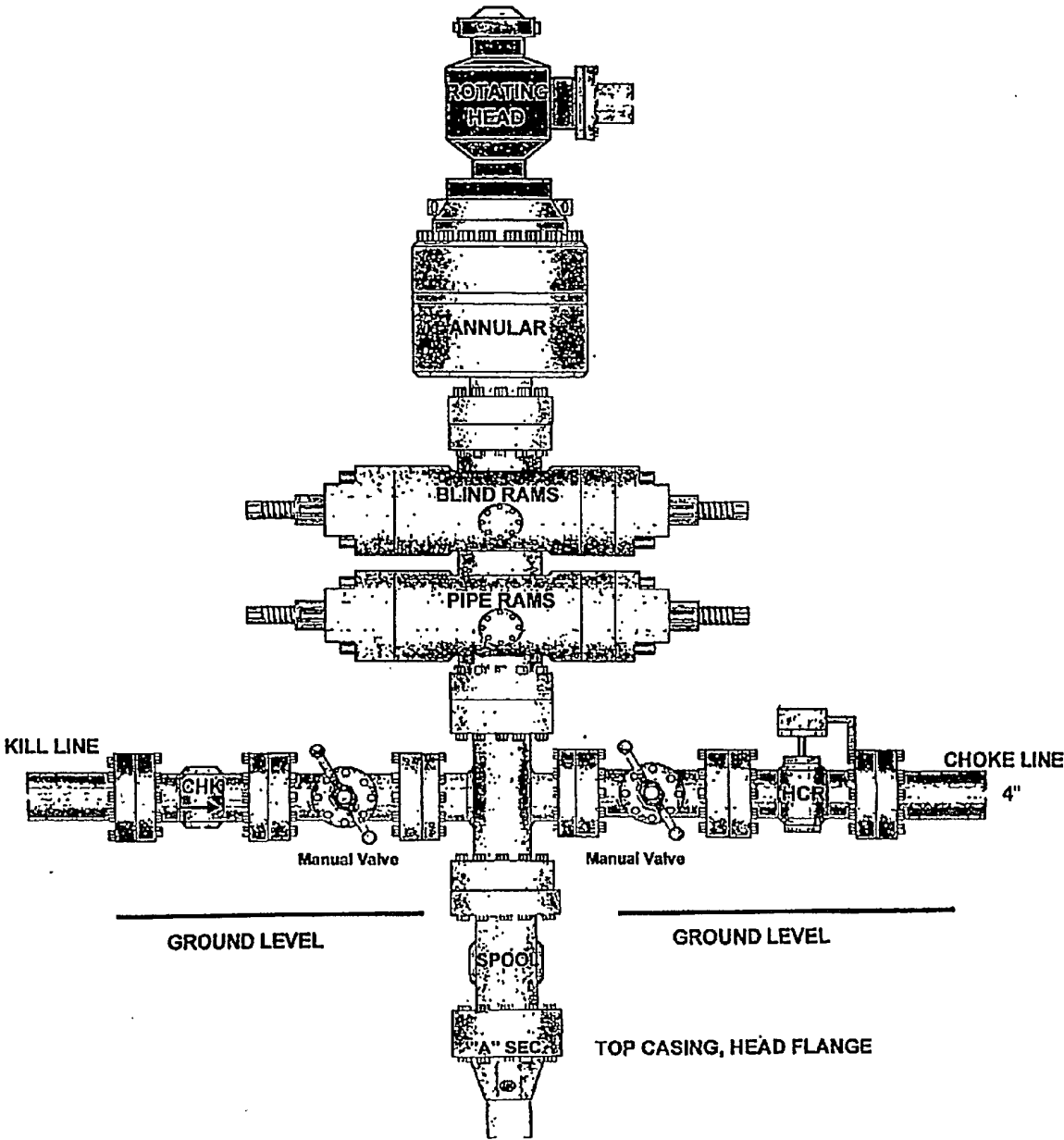
9. Abnormal Conditions

- Lost circulation may occur during drilling and will be cured with LCM materials and cement as required.
- We should encounter normal pressures (2500 psi @ 8250') and temperatures (156° @ 8250').

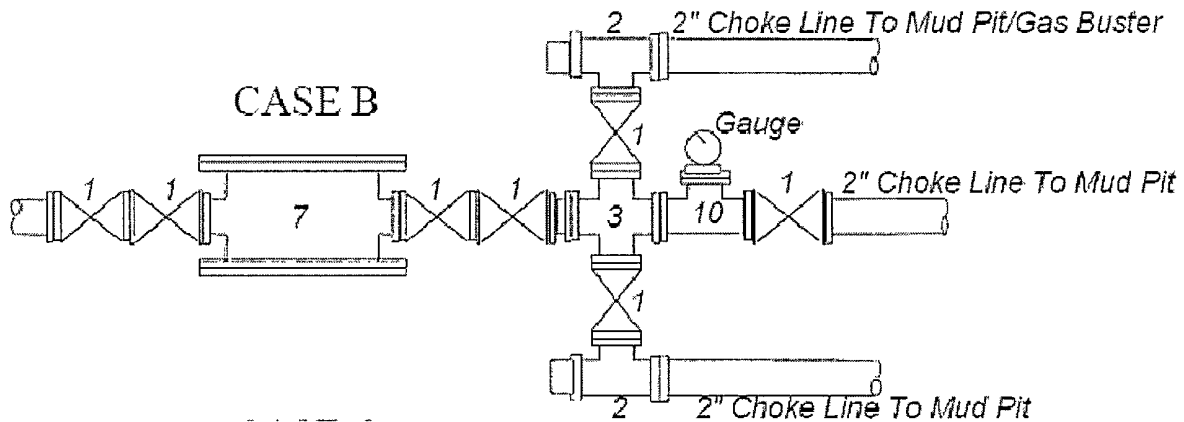


Arrington Oil & Gas, Inc. Green Wooley Booger Fed 5 #2

11" x 5,000 psi BOP stack



Choke Manifold



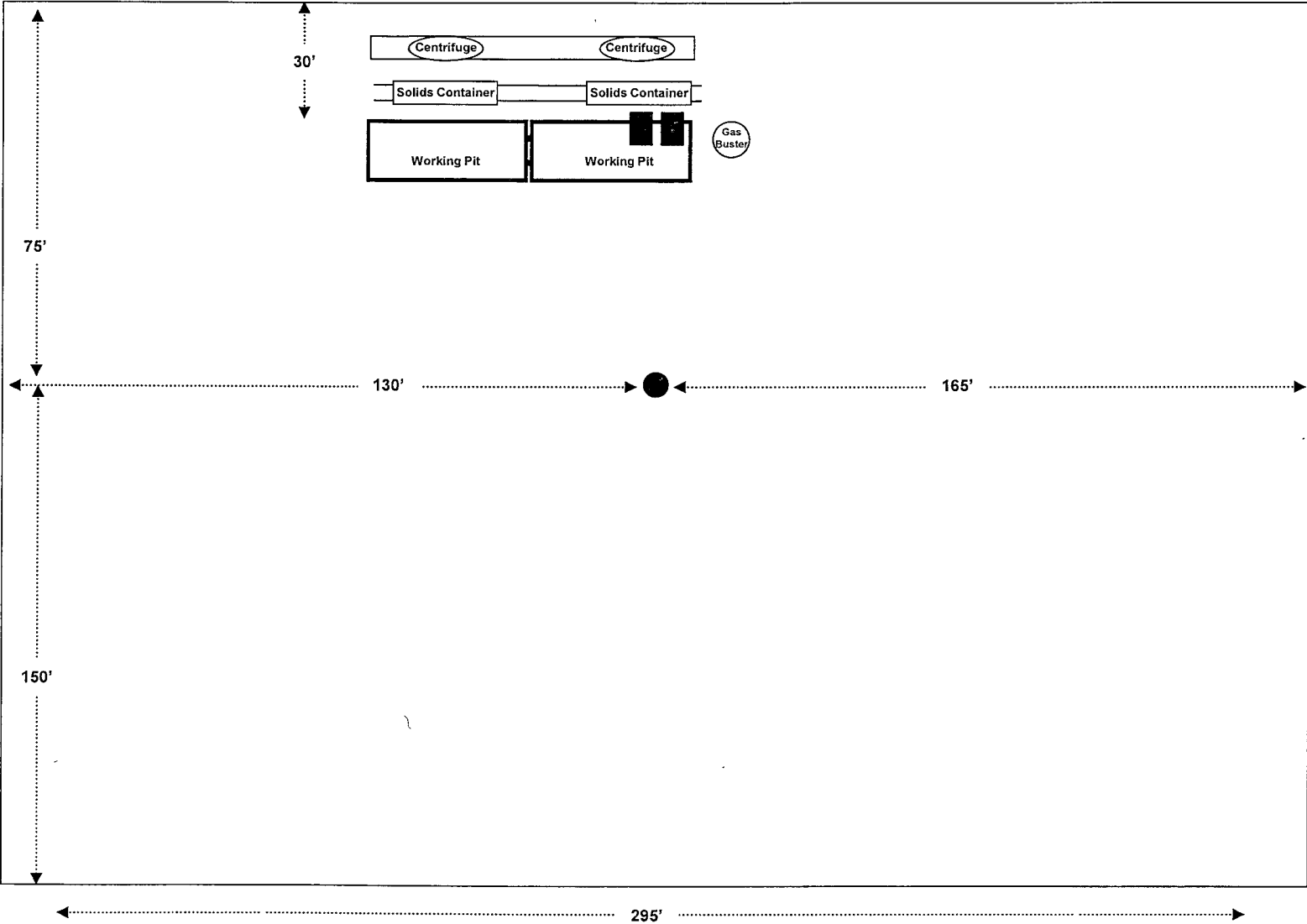
Legend

1. 2" flanged all steel valve must be either Cameron "F", Halliburton Low Torque or Shaffer Flo-Seal.
2. 2" flanged adjustable chokes, min. 1" full opening & equipped with hard trim.
3. 4" x 2" flanged steel cross.
4. 4" flanged steel tee.
5. 4" flanged all steel valve (Type as in no. 1).
6. Drilling Spool with 2" x 4" flanged outlet.
7. Drilling Spool with 2" x 2" flanged outlet.
8. 2" x 2" flanged steel cross.
9. 4" pressure operated gate valve.
10. 2" flanged steel tee.

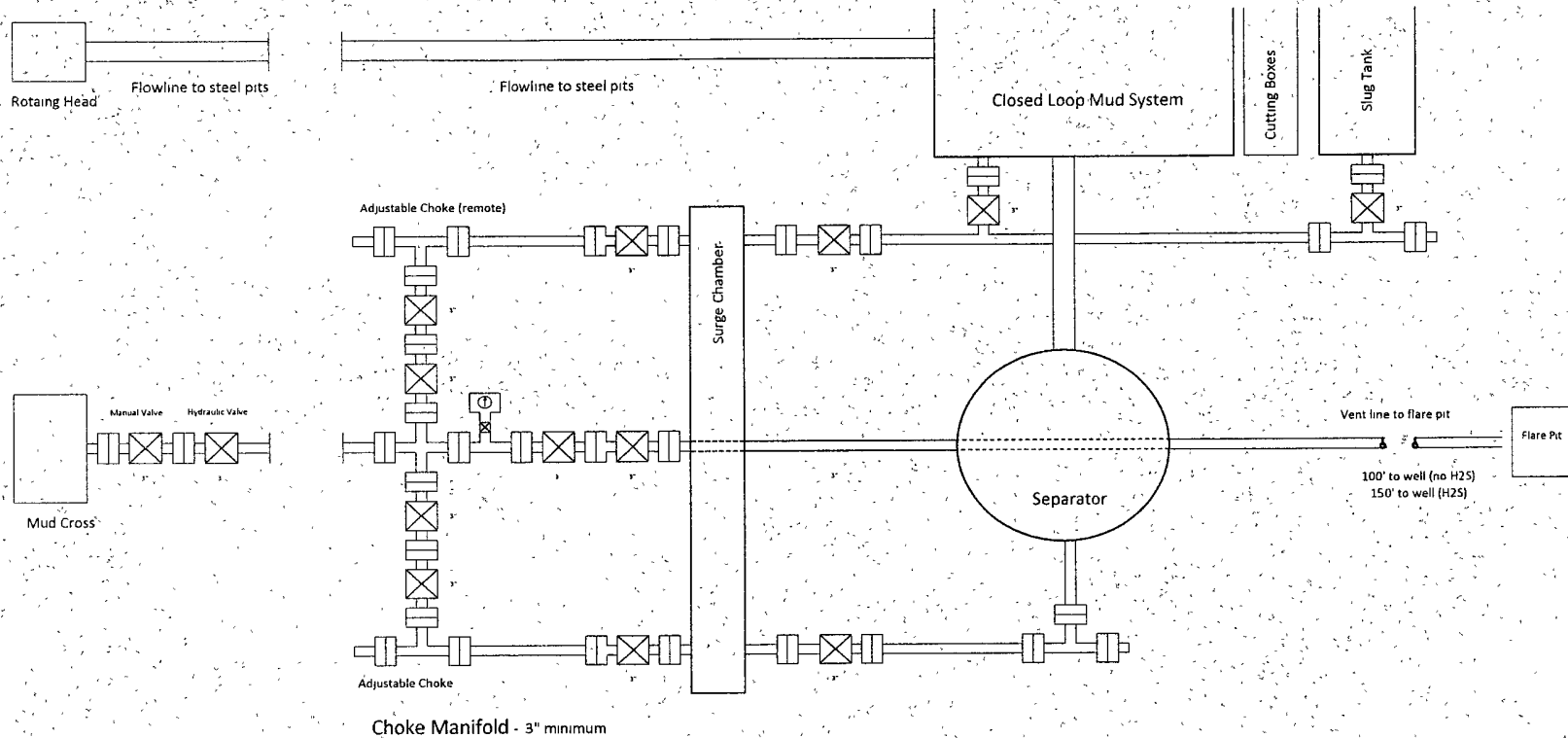
Notes

Choke manifold may be located in any convenient position. Use all steel fittings throughout. Make 90° turns with bull plugged tees only. No field welding will be permitted on any of the components of the choke manifold and related equipment upstream of the chokes. The choke spool and all lines and fittings must be at least equivalent to the test pressure of the preventers required. Independent closing control unit with clearly marked controls to be located on derrick floor near driller's position.

Green Wooley Booger Fed 5 No. 2
Nabors Rig 30
Closed - Loop Rig Pad Lay - Out



Choke Manifold Configuration with "Closed Loop System"



Notes

- Equipment configuration may vary
- Choke manifold may be located in any convenient position. Use steel fittings throughout. Make 90° turns with bull plugged tees only. No field welding will be permitted on any of the components of the choke manifold and related equipment upstream of the chokes. The choke spool and all lines and fittings must be at least equivalent to the test pressure of the preventors required. Independent closing control unit with clearly marked controls to be located on derrick floor near driller's position.

David H. Arrington Oil & Gas Inc.
Green Wooley Booger 5 Federal #2
NM103591 - Eddy County NM

August 25, 2009

Bureau of Land Management
620 E. Greene Street
Carlsbad, NM 88220

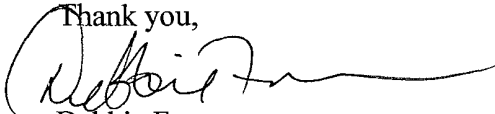
Oil Conservation Division
1301 Grand Ave.
Artesia, NM 88210

RE: David H. Arrington Oil & Gas, Inc.
Green Wooley Booger Fed 5 #2
Hoag Tank (Morrow)
Sec 5, T19S, R24E
Eddy County, NM

It is not anticipated that we will encounter any H2S during the drilling or completion of the above referenced well.

We are respectfully requesting an exemption from H2S requirements as per NMOCD Rule 118. The anticipated TD is 9000' for this proposed well. In the event the BLM determines a contingency plan is needed, please see the attached DHAOG plan.

Thank you,



Debbie Freeman
David H. Arrington Oil & Gas
PO Box 2071
Midland, TX 79702
432-682-6685 ext 357

Hydrogen Sulfide Drilling Operations Plan

for

David H. Arrington Oil & Gas, Inc.'s

Green Wooley Booger Federal 5 #2

ONE - Hydrogen Sulfide Training:

All personnel, whether regularly assigned, contracted or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

- The hazards and characteristics of hydrogen sulfide (H₂S);
- The proper use and maintenance of personal protective equipment and life support systems;
- The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds; and,
- The proper techniques of first aid and rescue procedures.

In addition, the supervisory personnel will be trained in the following areas:

- The effects of H₂S on metal components. If high tensile tubular are to be used, personnel will be trained in their special maintenance requirements;
- Corrective action and shut-in procedure when drilling or reworking a well and blowout prevention and well control procedures.
- The contents and requirements of the H₂S Drilling Operations Plan.

There will be an initial training session just prior to encountering a known or probable H₂S zone (within 3 days or 500') and weekly H₂S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H₂S Drilling Operations Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

TWO- H₂S Safety Equipment and Systems:

NOTE: All H₂S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or, three days prior to penetration of the first zone containing, or reasonably expected to contain, H₂S.

1. Well Control Equipment:

- Flare line with flare igniter;
- Choke manifold with one remote hydraulic choke installed;
- Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit;
- Auxiliary equipment to include an Annular Preventer.

2. Protective equipment for essential personnel:
 - The designated safety expert will provide 5-minute escape units located in the doghouse, and 30-minute air units at briefing areas.
3. H2S detection and monitoring equipment:
 - Three portable H2S monitors will be positioned on location for the best coverage and response. These units have warning lights and audible sirens when triggered by H2S levels > 20PPM.
 - One portable SO2 monitor will be positioned near flare line during H2S flaring operations.
4. Visual warning systems:
 - Wind direction indicators will be placed in accordance with the directives issued by the designated H2S expert.
 - Caution/Danger signs shall be posted on roads providing direct access to the location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be legible from the immediate location.
5. Mud Program:
 - The mud program will minimize the volume of H2S circulated to the surface. Proper mud weight safe drilling practices, and, if necessary, the use of H2S scavengers will minimize hazards when penetrating H2S bearing zones.
6. Metallurgy:
 - All drill strings, casing, tubing, wellhead, blowout preventers, drilling spools kill lines, choke manifold and line valves shall be suitable for H2S service.
 - All elastomers used for packing and seals shall be H2S trimmed.
7. Communications:
 - Radio and telephone communications will be available in company vehicles and rig doghouse.
8. Well Testing:
 - Drill stem testing will be performed with a minimum number of personnel necessary to safely and adequately conduct the test. The drill stem testing of any known formation that contains H2S will be conducted during daylight hours.
9. Emergency Numbers
 - David H. Arrington Oil & Gas, INC
 - Art Carrasco 423-559-0042
 - Jim Stein 817-437-3401
 - David Burgen 432-208-3170
 - State Police 575-885-3137
 - Sheriff's Office 575-887-7551
 - Ambulance 911
 - Fire Department 911
 - US BLM 575-887-6544
 - New Mexico Emergency Response Commission 575-476-9600

STATEMENT OF SURFACE USE

Operator	David H. Arrington Oil & Gas, Inc.
Well Name	Green Wooley Booger Fed 5
Well Number	2
Location	Township 19 South, Range 24 East, N.M.P.M. Section: 5 Eddy County, NM

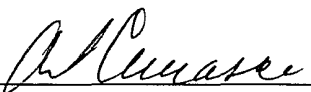
The surface for the ownership of the above described lands is a follows:

1. X owned by the United States of America.
2. _____ owned by the State of New Mexico.
3. X owned in fee by the following party(ies):

Name	Steve Haines (allotment # 8026)
Address	11032 #2 Lovington Highway
City/State/Zip	Artesia, NM 88210
Phone Number	575-748-2770

The undersigned is an authorized agent, or employee, of David H. Arrington Oil & Gas, Inc., and hereby certifies that the described lands are owned, as indicated above, and a surface agreement has been obtained, if required, from the owner.

Certified this 25th day of August, 2009.

by: 

Print Name: Art Carrasco

**Thirteen Point Plan for Surface Use
(Additional data for form 3160-3)**

David H. Arrington Oil & Gas, Inc., PO Box 2071, Midland, Texas 79702

Green Wooley Booger Fed 5 #2

898' FSL & 1952' FEL of Sec 5, T19S, R24E in Eddy County, NM

Morrow

NMNM 103591

1. EXISTING ROADS – A “VICINITY MAP” AND A “LOCATION VERIFICATION MAP” and a “LOCATION VERIFICATION MAP” by Topographic Land Surveys are attached which show the location of existing roads and the area topography.

The directions are as follows:

From junction of US Hwy 208 and County Road 21, approximately 12 miles south of Artesia, travel west 12.0 miles on County Road 21, thence, north 1.6 miles on lease road, thence west 0.8 miles, to a point \pm 900' southwest of the location.

2. PLANNED ACCESS ROAD – Approximately 0.2 miles of new N-S access road will be built from the existing E-W road as per the Topographic Land Surveyors map of August 12-09. All roads will constructed of 6” rolled and compacted caliche. The maximum width of the road will be 15'. Water will be deflected, as necessary, to avoid accumulation and prevent surface erosion.
3. LOCATION OF EXISTING WELLS – Plugged and abandoned wells approximately 2950' northwest and 2850' west from location.
4. LOCATION OF EXISTING OR PROPOSED FACILITIES – In the event the well is found productive, a tank battery will be utilized and the necessary production equipment will be installed on the pad site. The new facilities will be located just SW of the surface location as indicated on the Production Facilities Diagram.
5. LOCATION AND TYPE OF WATER SUPPLY – All water (fresh or otherwise) needed for the drilling and completion of this well will be purchased from a commercial source and trucked to the location via the existing and proposed access roads. No water source wells will be drilled, and no surface water will be utilized.

6. SOURCE OF CONSTRUCTION MATERIALS – Construction material (caliche) required for the preparation of the drill site is available on site or from a local BLM approved source. It is not anticipated that a significant amount of material will be required as the terrain is relatively flat. Transportation will be over the existing roads and proposed roads. All roads will be constructed of 6" rolled and compacted caliche.
7. METHODS FOR HANDLING WASTE DISPOSAL –
 - A closed loop drilling system will be employed.
 - Drill cuttings will be disposed in a state approved disposal site
 - Receptacles for solid wastes (paper, plastic, etc.) will be provided and equipped to prevent scattering by wind, animals, etc. This waste will be hauled to an approved landfill site. All drilling line, oil filters, etc. will be hauled away by the Drilling Contractor.
 - Any other waste generated by the drilling, completion, testing of this well will be removed from the site within 30 days of the completion of drilling or testing operations.
 - A Porta-John will be provided for the crews. This will be properly maintained during the drilling operations and removed upon completion of the well.
8. ANCILLARY FACILITIES – The drilling, completion, and/or testing of this well will require no ancillary facilities.
9. WELLSITE LAYOUT – Attached is a plat showing the anticipated orientation of rig and the pad. The drill site area has been surveyed and flagged.
10. PLANS FOR SURFACE RESTORATION – Reclamation of the surface location will be in accordance with the requirements set forth by the BLM. As stated earlier, all waste generated by this operation will be disposed of in an approved manner, and the site restored as closely as possible to its pre-operation appearance. Due to the topography of the area no problems are anticipated in achieving this status and no erosion or other detrimental effects are expected as a result of this operation.

11. SURFACE OWNERSHIP –

- The surface is owned by the US Government and is administered by the Bureau of Land Management. The surface is multiple use with the primary uses of the region for the grazing of livestock and the production of oil and gas.
- The surface use of the drill site and the access road are under the control/ownership of:

Steve Haines
11032 #2 Lovington Highway
Artesia, NM 88210
Allotment # 8026
(575) 748-2770

12. OTHER INFORMATION –

- The site has been archeologically surveyed by a registered archeological surveyor in August 2009 and submitted to the BLM, Carlsbad, NM.

13. BOND COVERAGE – David H. Arrington Oil & Gas, Inc. is covered by BLM Bond No. 104312789.

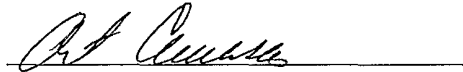
OPERATORS REPRESENTATIVE –David H. Arrington Oil & Gas, Inc. is represented by:

Art Carrasco
Company Operation & Completion Engineer
PO Box 2071
Midland, TX 79702
(Cell) 432-559-0042
(Off) 432-682-6685

CERTIFICATION

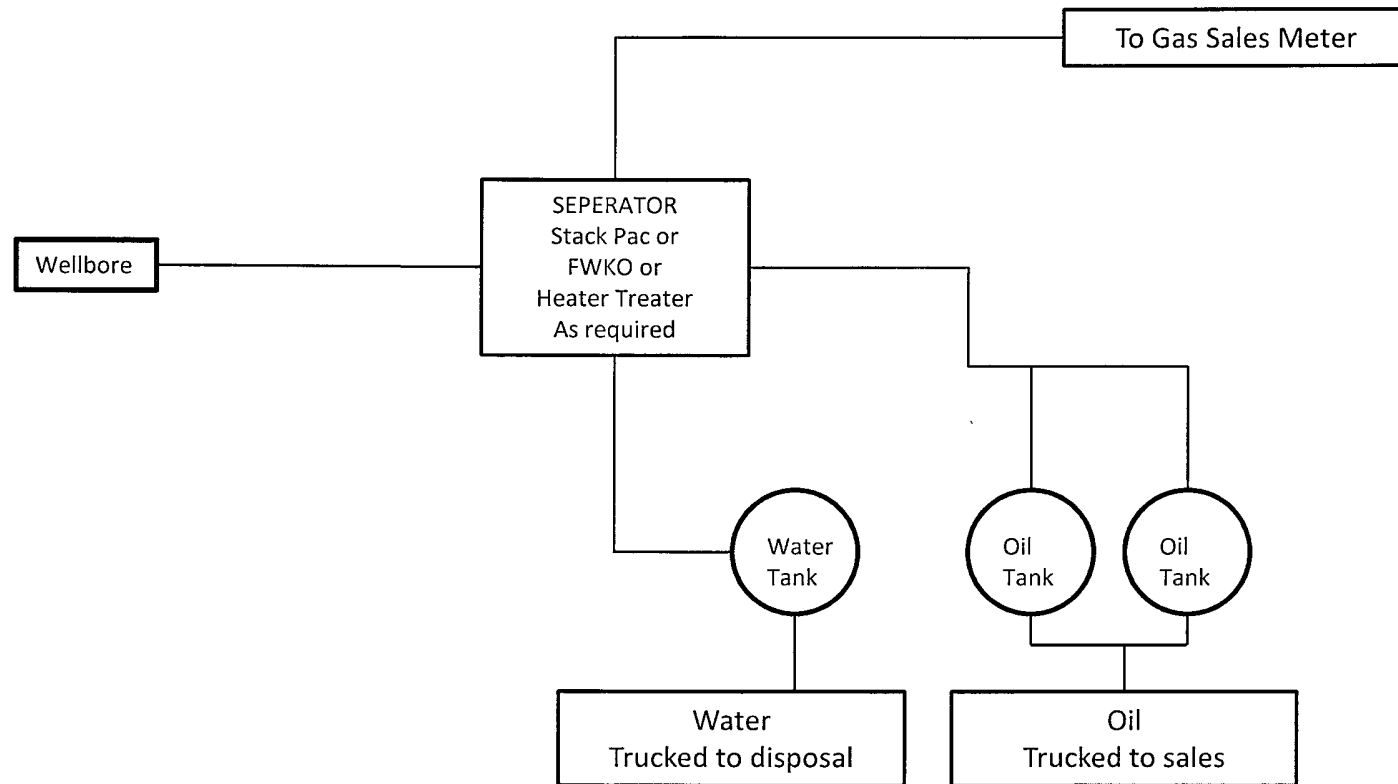
I HEREBY CERTIFY THAT I, OR SOMEONE UNDER MY DIRECT SUPERVISION, HAVE INSPECTED THE DRILL SITE AND ACCESS ROUTE PROPOSED HEREIN; THAT I AM FAMILIAR WITH THE CONDITIONS WHICH CURRENTLY EXIST; THAT I HAVE FULL KNOWLEDGE OF STATE AND Federal laws applicable to this operation; that the statements made in the APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this 16th day of September, 2009



Name Art Carrasco
Address PO Box 2071, Midland, TX 79702
Telephone 432-682-6685
E-mail art@arringtonoil.com

Agents not directly employed by the operator must submit a letter from the operator authorizing that agent to act or file this application on their behalf.

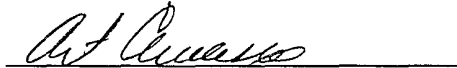


David H. Arrington Oil & Gas Inc.
General Production Facilities Diagram

OPERATOR CERTIFICATION

I HEREBY CERTIFY THAT I, OR SOMEONE UNDER MY DIRECT SUPERVISION, HAVE INSPECTED THE DRILL SITE AND ACCESS ROUTE PROPOSED HEREIN; THAT I AM FAMILIAR WITH THE CONDITIONS WHICH CURRENTLY EXIST; THAT I HAVE FULL KNOWLEDGE OF STATE AND Federal laws applicable to this operation; that the statements made in the APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this 16th day of September, 2009



Name Art Carrasco
Address PO Box 2071, Midland, TX 79702
Telephone 432-682-6685
E-mail art@arringtonoil.com

Agents not directly employed by the operator must submit a letter from the operator authorizing that agent to act or file this application on their behalf.

APPLICATION FOR TRANSPORTATION AND
UTILITY SYSTEMS AND FACILITIES
ON FEDERAL LANDS

FORM APPROVED
OMB NO. 1004-0189
Expires April 30, 2012

NOTE Before completing and filing the application, the applicant should completely review this package and schedule a preapplication meeting with representatives of the agency responsible for processing the application. Each agency may have specific and unique requirements to be met in preparing and processing the application. Many times, with the help of the agency representative, the application can be completed at the preapplication meeting.

FOR AGENCY USE ONLY

Application Number

Date filed

1. Name and address of applicant (include zip code)

David H. Arrington Oil & Gas, Inc
PO Box 2071
Midland, Texas 79702

2. Name, title, and address of authorized agent if different from Item 1 (include zip code)

3. TELEPHONE (area code)

Applicant

Authorized Agent

4. As applicant are you? (check one)

- a. ☐ Individual
b. ☒ Corporation*
c. ☐ Partnership/Association*
d. ☐ State Government/State Agency
e. ☐ Local Government
f. ☐ Federal Agency

* If checked, complete supplemental page

5. Specify what application is for: (check one)

- a. ☒ New authorization
b. ☐ Renewing existing authorization No.
c. ☐ Amend existing authorization No.
d. ☐ Assign existing authorization No.
e. ☐ Existing use for which no authorization has been received*
f. ☐ Other*

* If checked provide details under Item 7

6. If an individual, or partnership are you a citizen(s) of the United States? ☐ Yes ☐ No

7. Project description (describe in detail) (a) Type of system or facility, (e.g., canal, pipeline, road); (b) related structures and facilities; (c) physical specifications (length, width, grading, etc.); (d) term of years needed; (e) time of year of use or operation; (f) Volume or amount of product to be transported; (g) duration and timing of construction, and (h) temporary work areas needed for construction (Attach additional sheets, if additional space is needed.)

- (a) Road
(b) None
(c) Road to be built per BLM standards
(d) During construction and production of the well
(e) 24 hours a day, 7 days a week, 365 days a year
(f) Dependent on well productivity
(g) Construction to start as soon as possible, will last approximately 4 days
(h) None

8. Attach a map covering area and show location of project proposal

9. State or local government approval: ☐ Attached ☒ Applied for ☐ Not required

10. Nonreturnable application fee: ☐ Attached ☐ Not required

11. Does project cross international boundary or affect international waterways? ☐ Yes ☒ No (If "yes," indicate on map)

12. Give statement of your technical and financial capability to construct, operate, maintain, and terminate system for which authorization is being requested

David H. Arrington Oil & Gas, Inc is has current operations and has drilled wells in New Mexico, Texas, Arkansas, and Mississippi. All work is designed and performed utilizing in house technical resources.

13a Describe other reasonable alternative routes and modes considered.

There is an existing County Road to the North of the proposed location

b Why were these alternatives not selected?

This rout is shorter, disturbs less vegetation, and does not cross any streams.

c Give explanation as to why it is necessary to cross Federal Lands

Access to location in BLM leased property

14. List authorizations and pending applications filed for similar projects which may provide information to the authorizing agency. (Specify number, date, code, or name)

15. Provide statement of need for project, including the economic feasibility and items such as: (a) cost of proposal (construction, operation, and maintenance); (b) estimated cost of next best alternative, and (c) expected public benefits.

Road is needed to access minerals leased from BLM. Cost of construction is estimated at \$40,000. Alternative route would cost \$80,000 - \$90,000.

16. Describe probable effects on the population in the area, including the social and economic aspects, and the rural lifestyles.

Road will not effect rural life style. This is located in an area with substantial well development

17. Describe likely environmental effects that the proposed project will have on: (a) air quality; (b) visual impact; (c) surface and ground water quality and quantity; (d) the control or structural change on any stream or other body of water; (e) existing noise levels; and (f) the surface of the land, including vegetation, permafrost, soil, and soil stability

Road construction will create some dust during construction. Visual and surface impact will be minimal. No ground water or streams will be affected. Drainage will be per BLM specifications.

18. Describe the probable effects that the proposed project will have on (a) populations of fish, plantlife, wildlife, and marine life, including threatened and endangered species, and (b) marine mammals, including hunting, capturing, collecting, or killing these animals.

Road construction and maintenance will not adversely impact wildlife.

19. State whether any hazardous material, as defined in this paragraph, will be used, produced, transported or stored on or within the right-of-way or any of the right-of-way facilities, or used in the construction, operation, maintenance or termination of the right-of-way or any of its facilities. "Hazardous material" means any substance, pollutant or contaminant that is listed as hazardous under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. 9601 et seq., and its regulations. The definition of hazardous substances under CERCLA includes any "hazardous waste" as defined in the Resource Conservation and Recovery Act of 1976 (RCRA), as amended, 42 U.S.C. 9601 et seq., and its regulations. The term hazardous materials also includes any nuclear or byproduct material as defined by the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2011 et seq. The term does not include petroleum, including crude oil or any fraction thereof that is not otherwise specifically listed or designated as a hazardous substance under CERCLA Section 101(14), 42 U.S.C. 9601(14), nor does the term include natural gas

Materials transported to include well logging tools, and well drilling and stimulation materials.

20. Name all the Department(s)/Agency(ies) where this application is being filed

NMOCD

I HEREBY CERTIFY, That I am of legal age and authorized to do business in the State and that I have personally examined the information contained in the application and believe that the information submitted is correct to the best of my knowledge.

Signature of Applicant

Date

Title 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.

(Continued on page 3)

(SF-299, page 2)

APPLICATION FOR TRANSPORTATION AND UTILITY SYSTEMS
AND FACILITIES ON FEDERAL LANDS

GENERAL INFORMATION
ALASKA NATIONAL INTEREST LANDS

This application will be used when applying for a right-of-way, permit, license, lease, or certificate for the use of Federal lands which lie within conservation system units and National Recreation or Conservation Areas as defined in the Alaska National Interest Lands Conservation Act. Conservation system units include the National Park System, National Wildlife Refuge System, National Wild and Scenic Rivers System, National Trails System, National Wilderness Preservation System, and National Forest Monuments.

Transportation and utility systems and facility uses for which the application may be used are:

1. Canals, ditches, flumes, laterals, pipes, pipelines, tunnels, and other systems for the transportation of water.
2. Pipelines and other systems for the transportation of liquids other than water, including oil, natural gas, synthetic liquid and gaseous fuels, and any refined product produced therefrom
3. Pipelines, slurry and emulsion systems, and conveyor belts for transportation of solid materials.
4. Systems for the transmission and distribution of electric energy.
5. Systems for transmission or reception of radio, television, telephone, telegraph, and other electronic signals, and other means of communications.
6. Improved rights-of-way for snow machines, air cushion vehicles, and all-terrain vehicles.
7. Roads, highways, railroads, tunnels, tramways, airports, landing strips, docks, and other systems of general transportation.

This application must be filed simultaneously with each Federal department or agency requiring authorization to establish and operate your proposal.

In Alaska, the following agencies will help the applicant file an application and identify the other agencies the applicant should contact and possibly file with:

U.S. Department of Agriculture
FOREST SERVICE (USFS)
Alaska Regional Office (Region 10)
Physical Address
Federal Office Building
709 West 9th Street
Juneau, Alaska 99801
Mailing Address
P.O. Box 21628
Juneau, Alaska 99802
Telephone. 907-586-8806

U.S. Department of the Interior
BUREAU OF INDIAN AFFAIRS (BIA)
Alaska Regional Office (Juneau)
Mailing/Physical Address
P.O. Box 25520
709 West 9th Street
Juneau, Alaska 99802
Telephone. 800-645-8397

U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT (BLM)
Alaska State Office
Mailing/Physical Address
222 West 7th Avenue #13
Anchorage, Alaska 99513
Telephone. 907-271-5960

U.S. Department of the Interior
NATIONAL PARK SERVICE (NPS)
Alaska Regional Office (Anchorage)
Mailing/Physical Address
240 West 5th Avenue, Room 114
Anchorage, Alaska 99501
Telephone. 907-644-3501

U.S. Department of the Interior
FISH AND WILDLIFE SERVICE
Alaska Regional Office (Region 7)
Mailing/Physical Address:
1011 East Tudor Road
Anchorage, Alaska 99501
Telephone. 907-271-5011

Note: Filings with any Department of the Interior agency may be filed with any office noted above or with the:

U.S. Department of the Interior
OFFICE OF ENVIRONMENTAL POLICY AND COMPLIANCE
Alaska Regional Office (Anchorage)
Regional Environmental Officer
1689 C Street, Room 119
Anchorage, Alaska 99501
Telephone: (907) 271-5011

U.S. Department of Transportation
FEDERAL AVIATION ADMINISTRATION
Alaska Regional Office (Anchorage)
222 West 7th Avenue, #14
Anchorage, Alaska 99513
Telephone: 907-271-5269

NOTE - The Department of Transportation has established the above central filing point for agencies within that Department. Affected agencies are: Federal Aviation Administration (FAA), Coast Guard (USCG), Federal Highway Administration (FHWA), Federal Railroad Administration (FRA).

OTHER THAN ALASKA NATIONAL INTEREST LANDS

Use of this form is not limited to National Interest Conservation Lands of Alaska.

Individual departments/agencies may authorize the use of this form by applicants for transportation and utility systems and facilities on other Federal lands outside those areas described above.

For proposals located outside of Alaska, applications will be filed at the local agency office or at a location specified by the responsible Federal agency.

SPECIFIC INSTRUCTIONS
(Items not listed are self-explanatory)

Item

- 7 Attach preliminary site and facility construction plans. The responsible agency will provide instructions whenever specific plans are required
- 8 Generally, the map must show the section(s), township(s), and ranges within which the project is to be located. Show the proposed location of the project on the map as accurately as possible. Some agencies require detailed survey maps. The responsible agency will provide additional instructions
- 9, 10, and 12 - The responsible agency will provide additional instructions
- 13 Providing information on alternate routes and modes in as much detail as possible, discussing why certain routes or modes were rejected and why it is necessary to cross Federal lands will assist the agency(ies) in processing your application and reaching a final decision. Include only reasonable alternate routes and modes as related to current technology and economics.
- 14 The responsible agency will provide instructions.
- 15 Generally, a simple statement of the purpose of the proposal will be sufficient. However, major proposals located in critical or sensitive areas may require a full analysis with additional specific information. The responsible agency will provide additional instructions
- 16 through 19 - Providing this information in as much detail as possible will assist the Federal agency(ies) in processing the application and reaching a decision. When completing these items, you should use a sound judgment in furnishing relevant information. For example, if the project is not near a stream or other body of water, do not address this subject. The responsible agency will provide additional instructions.

Application must be signed by the applicant or applicant's authorized representative

If additional space is needed to complete any item, please put the information on a separate sheet of paper and identify it as "Continuation of Item".

SUPPLEMENTAL

NOTE: The responsible agency(ies) will provide additional instructions	CHECK APPROPRIATE BLOCK	
	ATTACHED	FILED*
I - PRIVATE CORPORATIONS		
a. Articles of Incorporation	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Corporation Bylaws	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. A certification from the State showing the corporation is in good standing and is entitled to operate within the State	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Copy of resolution authorizing filing	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. The name and address of each shareholder owning 3 percent or more of the shares, together with the number and percentage of any class of voting shares of the entity which such shareholder is authorized to vote and the name and address of each affiliate of the entity together with, in the case of an affiliate controlled by the entity, the number of shares and the percentage of any class of voting stock of that affiliate owned, directly or indirectly, by that entity, and in the case of an affiliate which controls that entity, the number of shares and the percentage of any class of voting stock of that entity owned, directly or indirectly, by the affiliate	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. If application is for an oil or gas pipeline, describe any related right-of-way or temporary use permit applications, and identify previous applications	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. If application is for an oil and gas pipeline, identify all Federal lands by agency impacted by proposal.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
II - PUBLIC CORPORATIONS		
a. Copy of law forming corporation	<input type="checkbox"/>	<input type="checkbox"/>
b. Proof of organization	<input type="checkbox"/>	<input type="checkbox"/>
c. Copy of Bylaws	<input type="checkbox"/>	<input type="checkbox"/>
d. Copy of resolution authorizing filing	<input type="checkbox"/>	<input type="checkbox"/>
e. If application is for an oil or gas pipeline, provide information required by Item "I-f" and "I-g" above	<input type="checkbox"/>	<input type="checkbox"/>
III - PARTNERSHIP OR OTHER UNINCORPORATED ENTITY		
a. Articles of association, if any	<input type="checkbox"/>	<input type="checkbox"/>
b. If one partner is authorized to sign, resolution authorizing action is	<input type="checkbox"/>	<input type="checkbox"/>
c. Name and address of each participant, partner, association, or other	<input type="checkbox"/>	<input type="checkbox"/>
d. If application is for an oil or gas pipeline, provide information required by Item "I-f" and "I-g" above	<input type="checkbox"/>	<input type="checkbox"/>

* If the required information is already filed with the agency processing this application and is current, check block entitled "Filed " Provide the file identification information (e g , number, date, code, name) If not on file or current, attach the requested information

SCC Number - 1452689

Date - September 28, 1989

Name - David H. Arrington Oil & Gas, Inc.

NOTICES

NOTE: This applies to the Department of the Interior/Bureau of Land Management (BLM).

The Privacy Act of 1974 provides that you be furnished with the following information in connection with the information provided by this application for an authorization.

AUTHORITY: 16 U.S.C. 310 and 5 U.S.C. 301.

PRINCIPAL PURPOSE: The primary uses of the records are to facilitate the (1) processing of claims or applications; (2) recordation of adjudicative actions; and (3) indexing of documentation in case files supporting administrative actions.

ROUTINE USES: BLM and the Department of the Interior (DOI) may disclose your information on this form: (1) to appropriate Federal agencies when concurrence or supporting information is required prior to granting or acquiring a right or interest in lands or resources; (2) to members or the public who have a need for the information that is maintained by BLM for public record; (3) to the U.S. Department of Justice, court, or other adjudicative body when DOI determines the information is necessary and relevant to litigation; (4) to appropriate Federal, State, local, or foreign agencies responsible for investigating, prosecuting violation, enforcing, or implementing this statute, regulation, or order; and (5) to a congressional office when you request the assistance of the Member of Congress in writing.

EFFECT OF NOT PROVIDING THE INFORMATION: Disclosing this information is necessary to receive or maintain a benefit. Not disclosing it may result in rejecting the application.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The Federal agencies collect this information from applicants requesting right-of-way, permit, license, lease, or certifications for the use of Federal Lands.

Federal agencies use this information to evaluate your proposal.

No Federal agency may request or sponsor and you are not required to respond to a request for information which does not contain a currently valid OMB Control Number.

BURDEN HOURS STATEMENT: The public burden for this form is estimated at 25 hours per response including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to: U.S. Department of the Interior, Bureau of Land Management (1004-0189), Bureau Information Collection Clearance Officer (WO-630) 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

A reproducible copy of this form may be obtained from the Bureau of Land Management, Division of Lands, Realty and Cadastral Survey, 1620 L Street, N.W., Rm. 1000 LS, Washington, D.C. 20036.



New Mexico Office of the State Engineer **Water Column/Average Depth to Water**

No records found.

Basin/County Search:

County: Eddy

PLSS Search:

Section(s): 5

Township: 19S

Range: 24E

Usage Filter:

Use: All Usages

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

August 25, 2009

Bureau of Land Management
620 E. Greene St.
Carlsbad, NM 88220

RE: ARC Survey: David H. Arrington Oil & Gas, Inc., **Green Wooley Booger Fed 5 #2
in Eddy County, NM.**

Concerning the above referenced well, the ARC Survey has been submitted by the survey
company by separate mailing – Advanced Archaeological Solutions, Las Cruces, NM.

Thank you, -



Debbie Freeman
David H. Arrington Oil & Gas, Inc.
PO Box 2071
Midland, TX 79702
432-682-6685 ext 357

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	David H Arrington Oil & Gas
LEASE NO.:	NM103591
WELL NAME & NO.:	2-Green Wooley Booger Fed 5
SURFACE HOLE FOOTAGE:	898' FSL & 1952' FEL
BOTTOM HOLE FOOTAGE:	' F L & ' F L
LOCATION:	Section 5, T. 19 S., R 24 E., NMPM
COUNTY:	Eddy County, New Mexico

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

- ☐ **General Provisions**
- ☐ **Permit Expiration**
- ☐ **Archaeology, Paleontology, and Historical Sites**
- ☐ **Noxious Weeds**
- ☒ **Special Requirements**
 - Aplomado Falcon
 - V-door Southeast
- ☐ **Construction**
 - Notification
 - Topsoil
 - Closed Loop System
 - Federal Mineral Material Pits
 - Well Pads
 - Roads
- ☐ **Road Section Diagram**
- ☒ **Drilling**
 - Logging requirement
- ☐ **Production (Post Drilling)**
 - Well Structures & Facilities
 - Pipelines
 - Electric Lines
- ☐ **Closed Loop System/Interim Reclamation**
- ☐ **Final Abandonment/Reclamation**

I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

V. SPECIAL REQUIREMENT(S)

1. The well pad will be constructed with the V-door to the southeast in order to parallel the drainage located to the southwest of the well site and reduce cut and fill. The well pad will be restricted to 150 feet to the northeast and 150 to the southwest from the center hole.
2. In order to minimize impacts to habitat for northern aplomado falcon, the following Conditions of Approval will apply:
 - No yuccas or trees over 5 feet in height will be damaged, to protect nesting structures.
 - All active raptor nests will be avoided by a minimum of 400 meters by all activities or curtail activities until fledging is complete. All inactive raptor nests will be avoided by a minimum of 200 meters by all activities.
 - Well pad size will not exceed 300 ft. x 390 ft.
 - All roads associated with well development will not exceed 30 ft in width
 - Reserve pits for drilling and disposal are not allowed unless the pit can be effectively netted to the satisfaction of the BLM. Steel tank circulation system must be used if the reserve pit is not netted.
 - All unused portions of the well pad associated with producing wells will be reclaimed following the abandoned well protocol below
 - Final abandonment protocol: Remove all caliche from well pads and roads that are plugged and abandoned. Reclamation will consist of disking, mulching, seeding with a drill (See seed mixture below), and application of water to encourage seed germination.

Buffalograss (<i>Buchloe dactyloides</i>)	4 lbs/acre
Blue grama (<i>Bouteloua gracilis</i>)	1 lbs/acre
Cane bluestem (<i>Bothriochloa barbinodis</i>)	5 lbs/acre
Sideoats grama (<i>Bouteloua curtipendula</i>)	5 lbs/acre
Plains bristlegrass (<i>Setaria macrostachya</i>)	6 lbs/acre

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5972 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall stockpile the topsoil of the well pad. The topsoil shall not be used to backfill the reserve pit and will be used for interim and final reclamation.

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT

If the operator elects to surface the access road and/or well pad, mineral materials extracted during construction of the reserve pit may be used for surfacing the well pad and access road and other facilities on the lease.

Payment shall be made to the BLM prior to removal of any additional federal mineral materials from any site other than the reserve pit. Call the Carlsbad Field Office at (575) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.

The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. ON LEASE ACCESS ROADS

Road Width

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed thirty (30) feet.

Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning

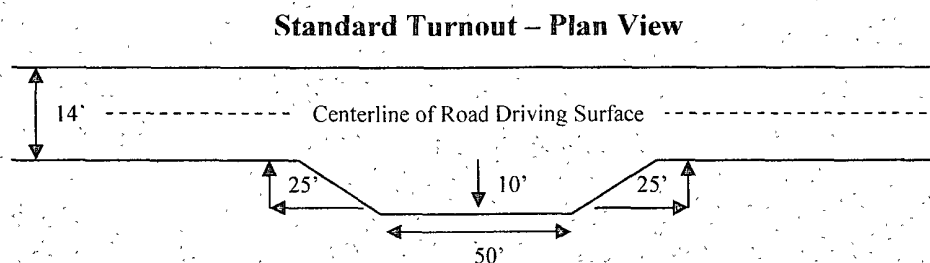
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Ditching

Ditching shall be required on both sides of the road.

Turnouts

Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:

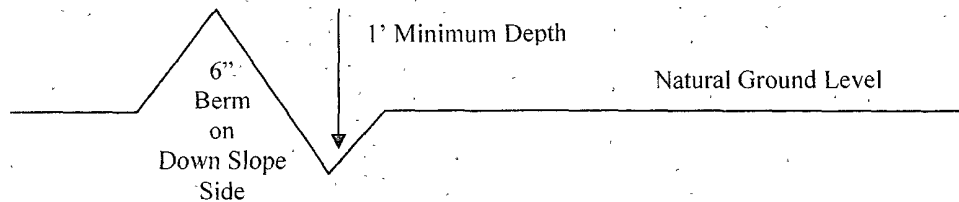


Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

$$400 \text{ foot road with } 4\% \text{ road slope: } \frac{400'}{4\%} + 100' = 200' \text{ lead-off ditch interval}$$

Culvert Installations

Appropriately sized culvert(s) shall be installed at the deep waterway channel flow crossing.

Cattleguards

An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s).

Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations.

A gate shall be constructed and fastened securely to H-braces.

Fence Requirement

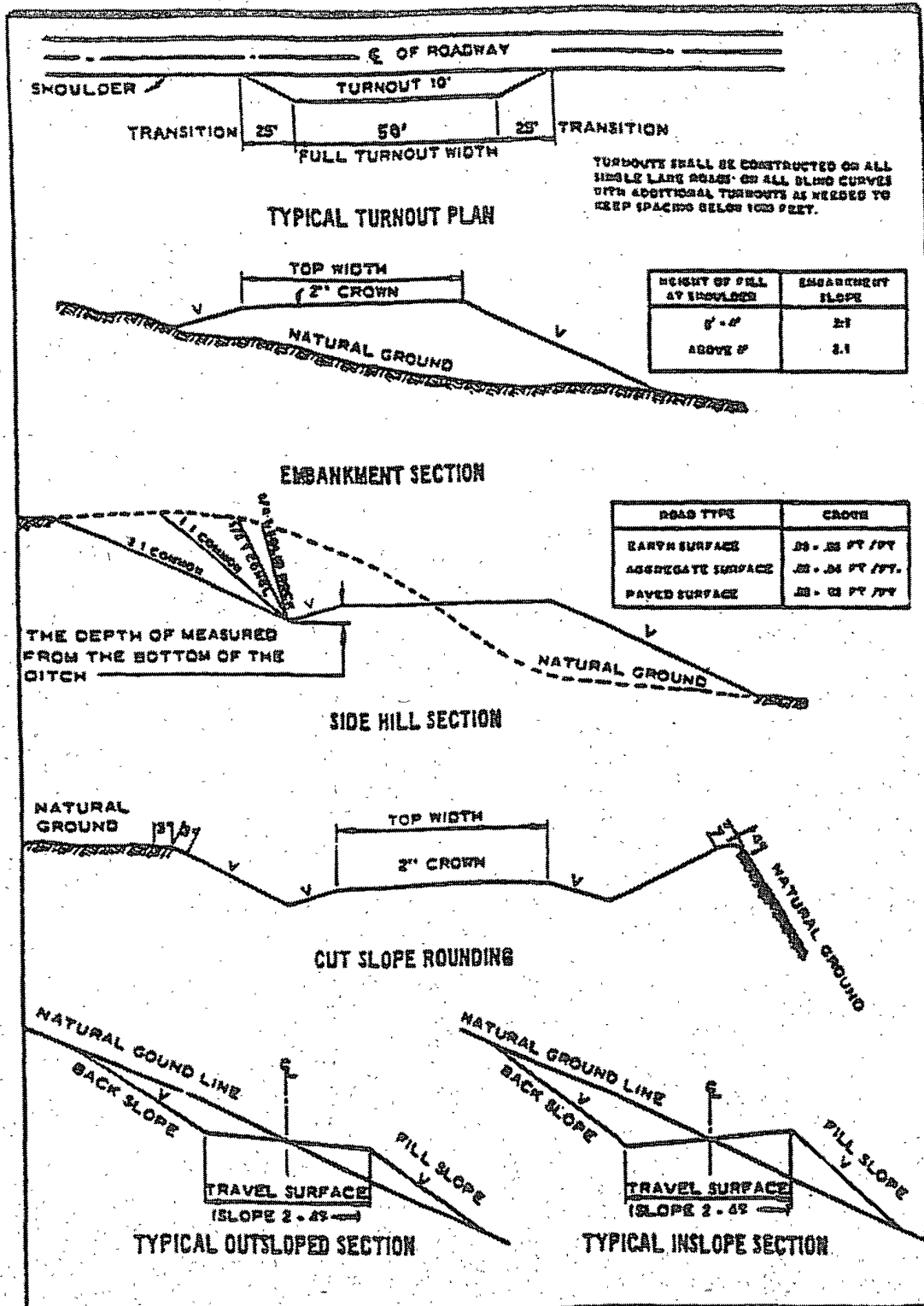
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Figure 1 – Cross Sections and Plans For Typical Road Sections



VII. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

- a. Spudding well
- b. Setting and/or Cementing of all casing strings
- c. BOPE tests

☒ **Eddy County**

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
(575) 361-2822

1. **Hydrogen Sulfide has been reported in the area, but no measurements have been recorded. It is recommended that monitoring equipment be onsite for potential Hydrogen Sulfide. If Hydrogen Sulfide is encountered, please report measurements and formations to the BLM.**
2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
4. **The record of the drilling rate along with the CAL/GR/N well log run from TD to surface will be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.**

B. CASING

Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work. Failure to obtain approval prior to work will result in an Incident of Non-Compliance being issued.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

Medium Cave/Karst

Possible loss of circulation in the Grayburg and San Andres formations.

Possible high pressures in the Wolfcamp and Pennsylvanian group.

1. The 8-5/8 inch surface casing shall be set **at approximately 1400 feet** and cemented to the surface. **Set casing within the San Andres, below the Lovington Sand.**
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
 - b. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.**
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The minimum required fill of cement behind the 5-1/2 inch production casing is:
 - a. First stage to DV tool, cement shall:
 - ☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job.
 - b. Second stage above DV tool, cement shall:
 - ☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office.

3. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **3000 (3M)** psi. BOP being set up as a **5M** with a **3M** hydril, which meets the minimum BLM requirements for a **3M** system.
3. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. The tests shall be done by an independent service company.
 - b. The results of the test shall be reported to the appropriate BLM office.
 - c. All tests are required to be recorded on a calibrated test chart. **A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.**
 - d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.
 - e. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the **Wolfcamp** formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

D. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** formation, and shall be used until production casing is run and cemented.

E. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

DHW 100509

VIII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Containment Structures

The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

Painting Requirement

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color
Shale Green, Munsell Soil Color Chart # 5Y 4/2

B. PIPELINES

C. ELECTRIC LINES

IX. INTERIM RECLAMATION & RESERVE PIT CLOSURE

A. INTERIM RECLAMATION

If the well is a producer, interim reclamation shall be conducted on the well site in accordance with the orders of the Authorized Officer. The operator shall submit a Sundry Notices and Reports on Wells (Notice of Intent), Form 3160-5, prior to conducting interim reclamation.

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

The operators should work with BLM surface management specialists to devise the best strategies to reduce the size of the location. Any reductions should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

Aplomado Falcon Habitat Seed Mixture

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

Buffalograss (Buchloe dactyloides)) -----	4 lbs/acre
Blue grama (Bouteloua gracilis) -----	1 lb/acre
Cane bluestem (Bothriochloa barbinodis) -----	5 lbs/acre
Sideoats grama (Bouteloua curtipendula) -----	5 lbs/acre
Plains bristlegrass (Setaria macrostachya) -----	6 lbs/acre

*Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed

X. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

Upon abandonment of the well and/or when the access road is no longer in service the Authorized Officer shall issue instructions and/or orders for surface reclamation and restoration of all disturbed areas.

On private surface/federal mineral estate land the reclamation procedures on the road and well pad shall be accomplished in accordance with the private surface land owner agreement.