DISTRICT II

# **State of New Mexico** Energy, Minerals, and Natural Resources Department

Form C-102

Revised October 12, 2005

Submit to Appropriate District Office State Lease - 4 copies

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Month Ken

Fee Lease - 3 copies

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

L CONSERVATION DIVISIØN 1220 South St. Francis Dr. Santa Fe, New Mexico 87505

AMENDED REPORT

# WELL LOCATION AND ACREAGE DEDICATION PLAT

30-005-6	3915	<sup>2</sup> Pool Code 75250	Cottonwood Creek; Wolfcamp	(695)
<sup>4</sup> Property Code			<sup>6</sup> Well Number 1 H	
70GRID No. 5898			<sup>8</sup> Operator Name NGTON OIL & GAS, INC.	9 Elevation 3368'

## <sup>10</sup> Surface Location

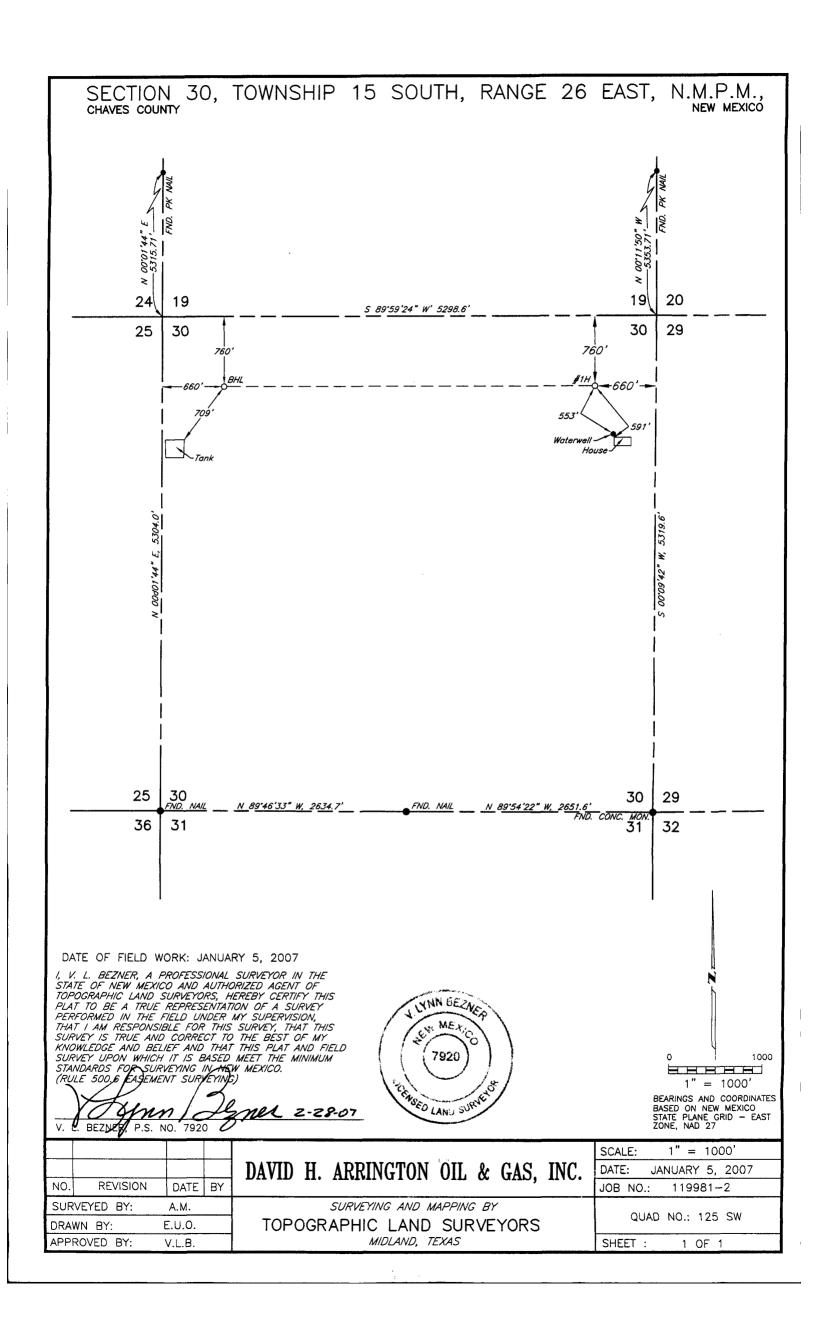
1	UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	A	30	15 SOUTH	26 EAST, N.M.P.M.		760'	NORTH	660'	EAST	CHAVES

# 11 Bottom Hole Location If Different From Surface

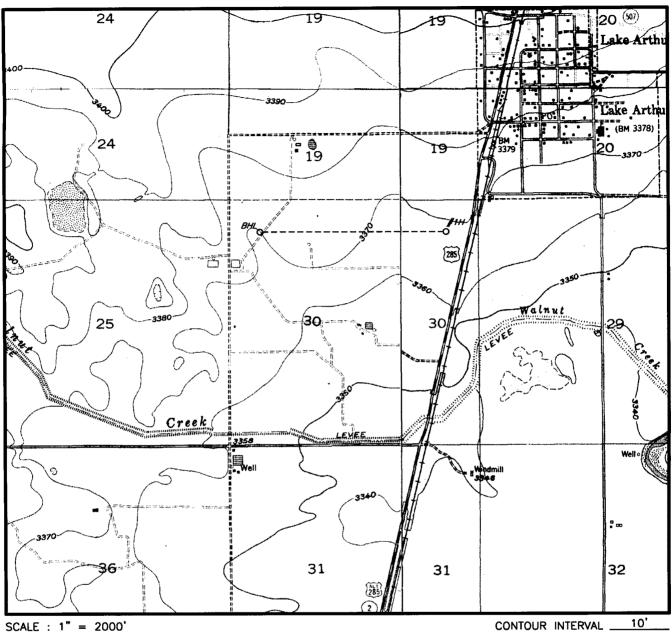
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	30	15 SOUTH	26 EAST, N.M.P.M.		760'	NORTH	660'	WEST	CHAVES
12 Dedicated Acre	Dedicated Acres 13 Joint or Infill 14 Consolidation Code		<sup>15</sup> Order N	0.		•			
320	2		_						

#### 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

760'		98°, 3975.7'	760'   760' 	50'-1	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 persuant 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.  Signature  Date  Printed Name
BOTTOMHOLE INFORMATION PROVIDED BY DAVID H. ARRINGTON OIL & GAS		NAD 27 NME ZONE  X = 488220  Y = 724445  LAT.: N 32.9915623  LONG:: W 104.3717525			I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.  JANUARY 31, 2007  Date of Survey Signature and Sandar Horesdome Surveyor  MEX.  Certificate Number V. L. BEANES AND FOR SW / E.U.O.



# LOCATION & ELEVATION VERIFICATION MAP



SECTION 30 TWP 15-S RGE 26-E SURVEY NEW MEXICO PRINCIPAL MERIDIAN CHAVES STATE NM DESCRIPTION 760' FNL & 660' FEL ELEVATION \_\_\_\_\_ 3368'



OPERATOR DAVID H. ARRINGTON OIL & GAS

RED HOT #1H LEASE \_\_\_\_

U.S.G.S. TOPOGRAPHIC MAP

ARTESIA NE, NEW MEXICO

SCALED LAT. LAT.: N 32.9915623

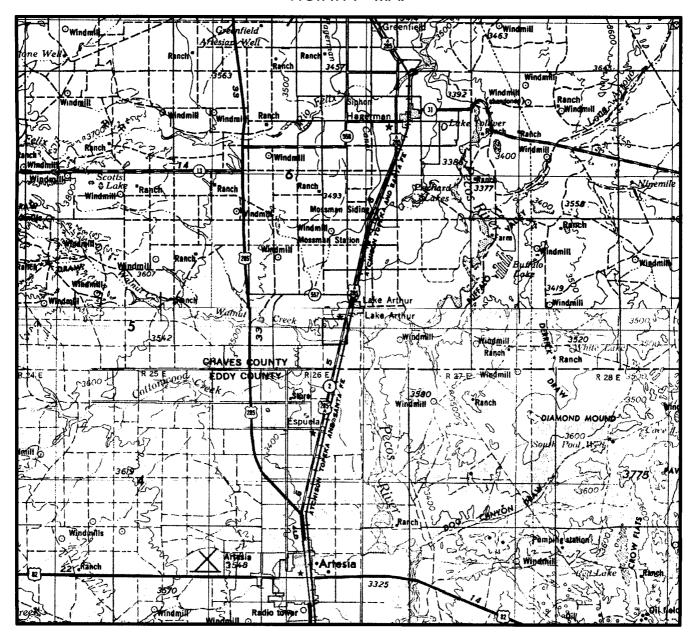
LONG. LONG.: W 104.3717525

## TOPOGRAPHIC LAND SURVEYORS

Surveying & Mapping for the Oil & Gas Industry

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

# VICINITY MAP



SECTION	TWP	15-S	_ RGE	<u> 26–E</u>
SURVEY	NEW MEXICO	PRINCIPAL N	<u> IERIDIAN</u>	
COUNTY	CHAVES	STAT	TE <u>NM</u>	
DESCRIPTION .		760' FNL & 6	60' FEL	

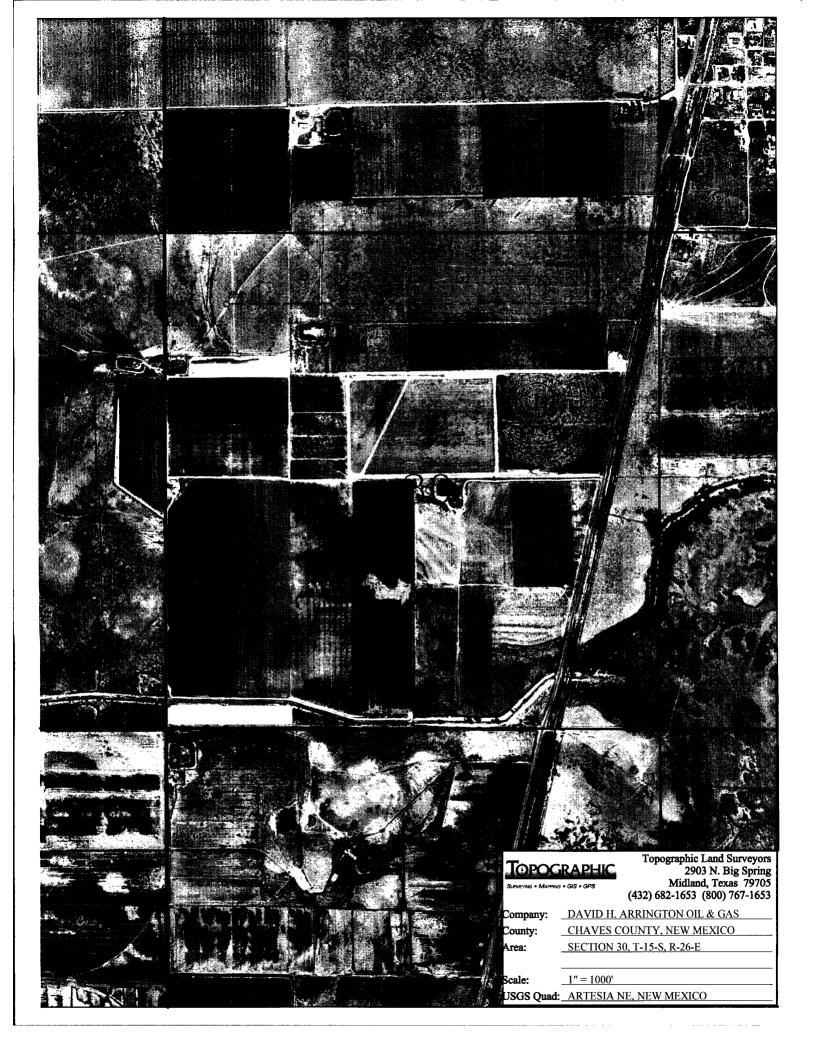
OPERATOR DAVID H. ARRINGTON OIL & GAS
LEASE RED HOT #1H
DISTANCE & DIRECTION FROM INTERSECTION OF HWY.
285 & HWY. 82, GO NORTH ±1.5 MILES ON HWY. 285,
THENCE NORTHEAST 6.8 MILES ON HWY. 2 (ALT. 285)
TO A POINT ±650' EAST OF THE LOCATION.
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# **TOPOGRAPHIC LAND SURVEYORS**

Surveying & Mapping for the Oil & Gas Industry

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



David H. Arrington Oil & Gas Inc. Red Hot 1H SHL - 760' FNL & 660' FEL BHL - 760' FNL & 660' FWL S30, T15S, R26E Chaves County, NM Orilling Plan

1. Ground elevation above sea level: 3368'

2. Proposed drilling depth: 5300' TVD

#### 3. Estimated tops of geological markers:

Tubb	3350'
Abo Shale	4050'
Abo Carbonate	4350'
Wolfcamp	4965'

#### 4. Possible mineral bearing formations:

Abo/Wolfcamp	Gas/Oil
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#### 5. Casing Program

<u>Hole size</u>	Interval	OD of Casing	Weight	<u>Thread</u>	Grade	TOC
12-1/4"	40' - 1700'	8-5/8"	32#	LTC	J55	Surf
7-7/8"	1100' - 8807'	5-1/2"	17#	LTC	180	Surf

Drill 7-7/8" vertical pilot hole to  $\sim$ 5300'. Plug back to  $\sim$  4633' w/ open hole whipstock and build 15° BUR curve section landing at  $\sim$  4995' TVD. Drill ahead to a total measured depth of  $\sim$  8807'. Run 5-1/2" production string to TD and cement to surface.

#### 6. Cementing and Setting Depth

String	<u>Depth</u>	Sks		Slurry
8-5/8" Surface	1200'	410	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% CaCl₂ (14.8 / 1.34)

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

5-1/2" Production	8807'	600 350	Lead: Tail:	Interfill C w/ 1/8# pps Poly-E-Flake (11.9 / 2.45) Howco Acid Soluble Cement w/ 10# silicalite 50/50 blend, 0.5% Halad 344, 0.2% HR-601 & 0.25 pps D-Air 3000
				5.5 % Talada 6 Ti, 6.2 % Til Coo Talada 6 Til Coo Talada

(14.8 / 2.68)

#### 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 40' - 1/100' [2cc'	Mud Wt. 8.5 - 8.6	Visc. 32 – 38	FL NC	Type Mud System  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.
1100' - 8807'	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 ~ 3,900' 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.

Proposed Drilling Plan:

Drill 12-1/4" surface hole to 1/00'. Run 8-5/8" and cement to surface.

Drill 7-7/8" vertical pilot hole to  $\sim$ 5300'. Plug back to  $\sim$  4633' w/ open hole whipstock and build 15° BUR curve section landing at  $\sim$  4995' TVD. Drill ahead to a total measured depth of  $\sim$  8807'. Run 5-1/2" production string to TD and cement to surface.

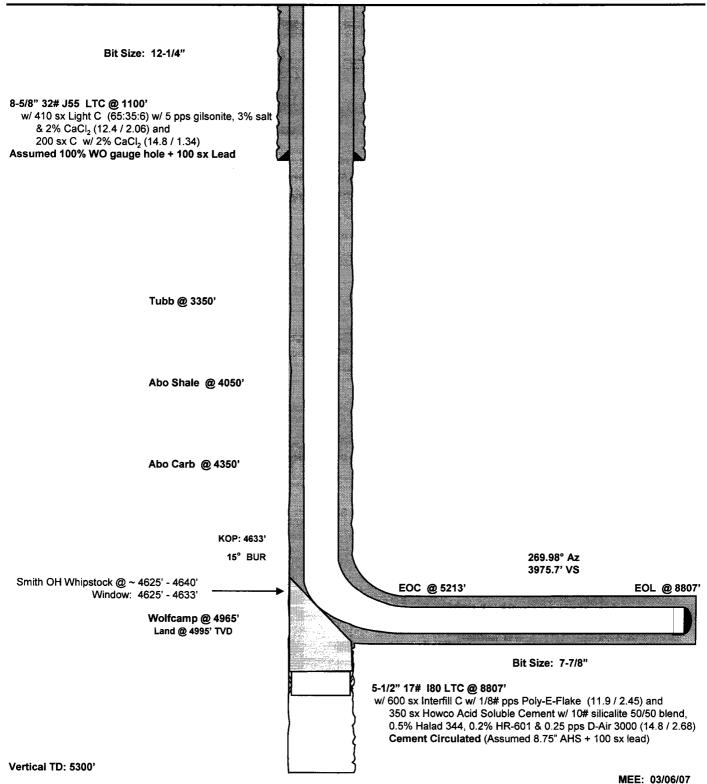
# Red Hot 1H Cottonwood Creek Field Chaves County, New Mexico

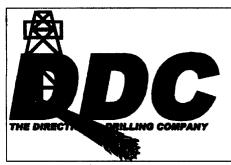
Surface 760' FNL 660' FEL Lateral Terminus 760' FNL 660' FWL

**Proposed Wellbore** 

KB: 3387' GL: 3368'

S-30 T15S, R26E





Job Number: I

Company: David H. Arrington Oil & Gas

Lease/Weil: Red Hot #1H

**Location: Chaves County** 

Rig Name: II RKB: II

G.L. or M.S.L.: [

State/Country: New Mexico

Declination:  ${\bf I}$ 

Grid: 🛭

File name: C:\DOCUME~1\RICKMA~1\MYDOCU~1\PROPOS~1\ARI

Date/Time: 06-Mar-07 / 13:17 Curve Name: Preliminary Plan

## **The Directional Drilling Company**

#### WINSERVE PROPOSAL REPORT

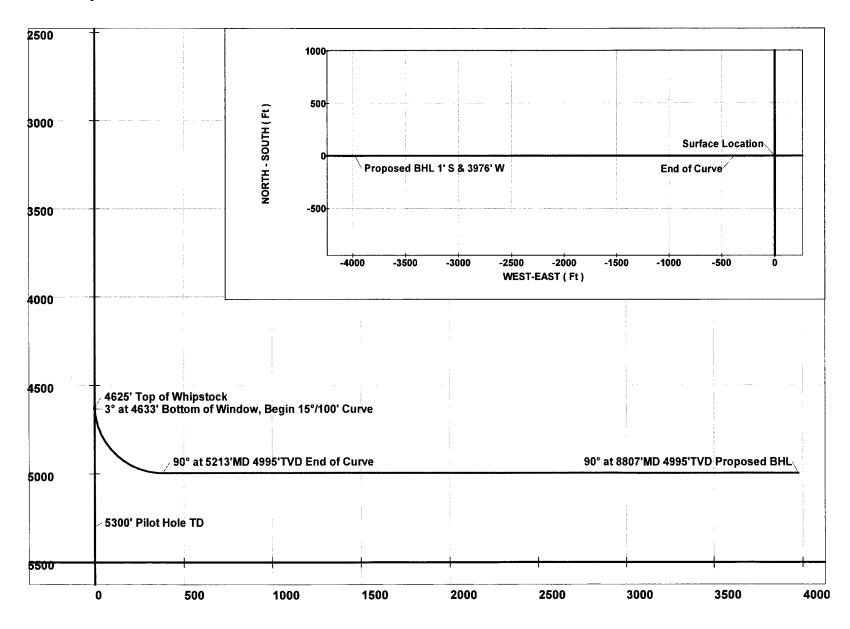
Minimum Curvature Method
Vertical Section Plane 269.98
Vertical Section Referenced to Wellhead
Rectangular Coordinates Referenced to Wellhead

inci	Drift	True	Vertical			CLOSURE		Dogleg
Angle Deg	Direction Deg	Vertical Depth	Section FT	N-S FT	E-W FT	Distance FT	Direction Deg	Severity Deg/100
						· · · · · · · · · · · · · · · · · · ·		
ipstock								
.00	.00	4625.00	.00	.00	.00	.00	.00	.00
Window, I	Begin 15°/100	)' Curve						
3.00	269.98	4633.00	.21	.00	21	.21	269.98	37.50
10.50	269.98	4682.61	6.08	.00	-6.08	6.08	269.98	15.00
								15.00
								15.00
33.00	269.98	4821.04	61.31	02	-61.31	61.31	269.98	15.00
40.50	269.98	4861.08	91.20	03	-91.20	91.20	269.98	15.00
								15.00
55.50	269.98							15.00
								15.00
70.50	269.98	4973.08	254.14	09	-254.14	254.14	269.98	15.00
78.00	269 98	4986 65	302 23	- 11	-302 23	302 23	269 98	15.00
85.49	269.98	4993.82	351.68	12	-351.68	351.68	269.98	15.00
rve								
90.00	269.98	4995.00	381.68	13	-381.68	381.68	269.98	15.00
90.00	269.98	4995.00	581.68	20	-581.68	581.68	269.98	.00
90.00	269.98	4995.00	781.68	27	-781.68	781.68	269.98	.00
90.00	269.98	4995.00	981.68	34	-981.68	981.68	269.98	.00
90.00	269.98	4995.00	1181.68	41	-1181.68	1181.68	269.98	.00
90.00	269.98	4995.00	1381 68	- 4R	-1381 68	1381 68	269 98	.00
00.00		.000.00	. 50 1.00	0	1001.00	.001.00	200.00	.00
	Angle Deg  ipstock .00  Window, I 3.00  10.50 18.00 25.50 33.00  40.50 48.00 55.50 63.00 70.50  78.00 85.49  rve 90.00 90.00 90.00 90.00 90.00	Angle Direction Deg  ipstock .00 .00  Window, Begin 15°/100 3.00 269.98 10.50 269.98 18.00 269.98 25.50 269.98 33.00 269.98 40.50 269.98 48.00 269.98 55.50 269.98 70.50 269.98 70.50 269.98 70.50 269.98 70.50 269.98 70.50 269.98 70.50 269.98 70.50 269.98 70.50 269.98 70.50 269.98 90.00 269.98 90.00 269.98 90.00 269.98 90.00 269.98	Angle Deg         Direction Deg         Vertical Depth           ipstock         .00         .00         4625.00           Window, Begin 15°/100' Curve         3.00         269.98         4633.00           10.50         269.98         4682.61         18.00         269.98         4731.04           25.50         269.98         4777.45         33.00         269.98         4821.04           40.50         269.98         4861.08         48.00         269.98         4896.87           55.50         269.98         4953.35         70.50         269.98         4973.08           78.00         269.98         4973.08         4986.65         85.49         269.98         4993.82           rve         90.00         269.98         4995.00         90.00         269.98         4995.00           90.00         269.98         4995.00         90.00         269.98         4995.00           90.00         269.98         4995.00         90.00         269.98         4995.00	Angle Deg         Direction Deg         Vertical Depth         Section FT           ipstock         .00         .00         4625.00         .00           Window, Begin 15°/100' Curve         3.00         269.98         4633.00         .21           10.50         269.98         4633.00         .21           10.50         269.98         4731.04         18.38           25.50         269.98         4777.45         36.89           33.00         269.98         4821.04         61.31           40.50         269.98         4861.08         91.20           48.00         269.98         4896.87         126.06           55.50         269.98         4927.80         165.30           63.00         269.98         4973.08         254.14           78.00         269.98         4973.08         254.14           78.00         269.98         4993.82         351.68           rve           90.00         269.98         4995.00         581.68           90.00         269.98         4995.00         781.68           90.00         269.98         4995.00         981.68           90.00         269.98         4995.00         <	Angle Deg         Direction Deg         Vertical Depth         Section FT         N-S FT           ipstock         .00         .00         .4625.00         .00         .00           Window, Begin 15°/100' Curve         3.00         269.98         4633.00         .21         .00           10.50         269.98         4682.61         6.08         .00           18.00         269.98         4731.04         18.38        01           25.50         269.98         4777.45         36.89        01           33.00         269.98         4821.04         61.31        02           40.50         269.98         4861.08         91.20        03           48.00         269.98         4896.87         126.06        04           55.50         269.98         4927.80         165.30        06           63.00         269.98         4953.35         208.24        07           70.50         269.98         4973.08         254.14        09           78.00         269.98         4986.65         302.23        11           85.49         269.98         4995.00         381.68        12           rve         90.00 <td>  Deg   Direction   Depth   Depth   FT   FT   FT   FT    </td> <td>  Angle   Direction   Deg</td> <td>  Direction   Deg   Depth   Section   FT   FT   FT   Distance   Direction   Deg    </td>	Deg   Direction   Depth   Depth   FT   FT   FT   FT	Angle   Direction   Deg	Direction   Deg   Depth   Section   FT   FT   FT   Distance   Direction   Deg

Depth Angle	Incl		True Vertical Depth	Vertical Section FT	N-S FT	E-W FT	CLOSURE		Dogleg
	Angle Deg						Distance FT	Direction Deg	Severity Deg/100
6613.04	90.00	269.98	4995.00	1781.68	62	-1781.68	1781.68	269.98	.00
6813.04	90.00	269.98	4995.00	1981.68	69	-1981.68	1981.68	269.98	.00
7013.04	90.00	269.98	4995.00	2181.68	76	-2181.68	2181.68	269.98	.00
7213.04	90.00	269.98	4995.00	2381.68	83	-2381.68	2381.68	269.98	.00
7413.04	90.00	269.98	4995.00	2581.68	90	-2581.68	2581.68	269.98	.00
7613.04	90.00	269.98	4995.00	2781.68	97	-2781.68	2781.68	269.98	.00
7813.04	90.00	269.98	4995.00	2981.68	-1.04	-2981.68	2981.68	269.98	.00
8013.04	90.00	269.98	4995.00	3181.68	-1.11	-3181.68	3181.68	269.98	.00
8213.04	90.00	269.98	4995.00	3381.68	-1.18	-3381.68	3381.68	269.98	.00
8413.04	90.00	269.98	4995.00	3581.68	-1.25	-3581.68	3581.68	269.98	.00
8613.04	90.00	269.98	4995.00	3781.68	-1.32	-3781.68	3781.68	269.98	.00
Proposed	BHL								
8807.05	90.00	269.98	4995.00	3975.70	-1.39	-3975.70	3975.70	269.98	.00

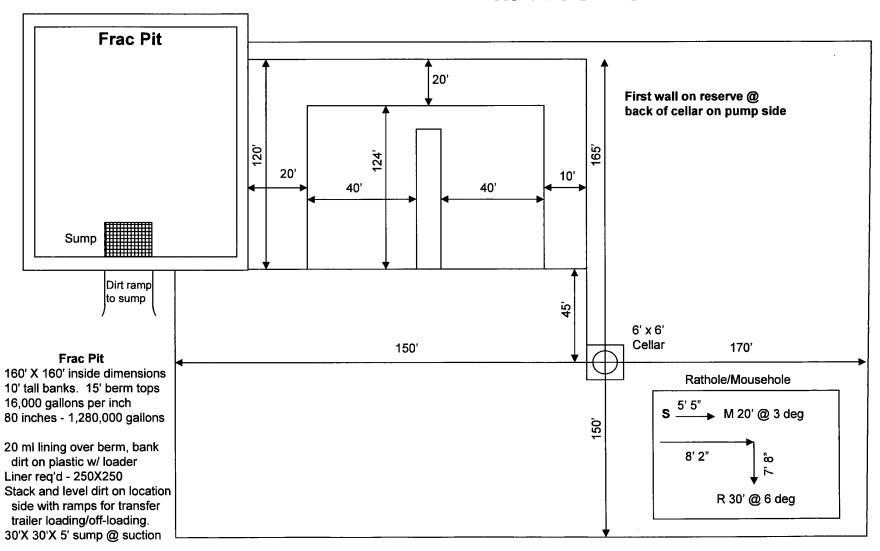
Company: David H. Arrington Oil & Gas Lease/Well: Red Hot #1H Location: Chaves County State/Country: New Mexico





VERTICAL SECTION (Ft) @ 269.98°

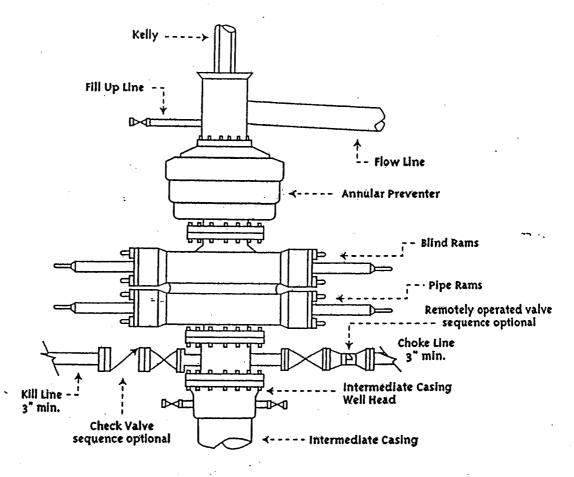
# Patterson Rig 624 Location Layout w/ Frac Pit



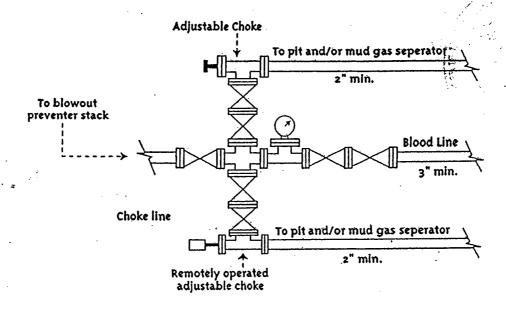


David H. Arrington Oil & Gas, Inc.

# Typical 5,000 psi Pressure System Schematic Annular Double Ram Preventer Stack



Typical 3,000 psi choke manifold assembly with at least these minimum features



# David H. Arrington Oil & Gas, Inc. 214 W. Texas Ave, Suite 400 Midland, TX 79701 432-682-6685 Office 432-682-4139 Fax

March 6, 2007

Oil Conservation Division Attn: Mr. Bryan Arrant 1301 Grand Ave. Artesia, NM 88210

RE: David H. Arrington Oil & Gas, Inc., Red Hot #1H; Cottonwood Creek; Wolfcamp, UL A, Sec 30, T15S, R26E, in Chaves 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 TVD is 5300', the TMD is 8807' for this proposed horizontal well. In the event the OCD determines the need for a contingency plan, we will comply with the requirements of the NMOCD Rule 118.

Thank you,

Debbie Freeman

David H. Arrington Oil & Gas

PO Box 2071

Midland, TX 79702

432-682-6685 ext 357

# New Mexico Office of the State Engineer POD Reports and Downloads

Township: 15S Range: 26E Sections: 30 NAD27 X: 488220 Y: 724445 Zone: C Search Radius: 1 County: CH Ä Number: Suffix: Basin: Owner Name: (First) (Last) ○ Non-Domestic ○ Domestic ● All POD / Surface Data Report Avg Depth to Water Report Water Column Report Clear Form iWATERS Menu Help

AVERAGE DEPTH OF WATER REPORT 03/06/2007

 Bsn
 Tws
 Rng
 Sec
 Zone
 X
 Y
 Wells
 Min
 Max
 Avg

 RA
 15S
 26E
 30
 17
 28
 200
 70

Record Count: 17