NMOCD

New Mexico Oil Conservation Division, District I
1625 N. French Drive
Hobbs, NM 88240

RECEIVED
DEC 09 2009
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Form 3160-3
(August 2007)

FORM APPROVED
OMB No. 1004-0137
Expires July 31, 2010

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No. NMNM 105886	
6. If Indian, Allotee or Tribe Name N/A	
1a. Type of work: ☑ DRILL ☐ REENTER	7. If Unit or CA Agreement, Name and No. N/A
1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone	8. Lease Name and Well No. Medlin Fed Com 9-1 H (39442)
2. Name of Operator Marshall and Winston Incorporated (14187)	9. API Well No. 30-005-29113
3a. Address P.O. Box 50880 Midland, TX 79710-0880	3b. Phone No. (include area code) (432) 684-6373
10. Field and Pool, or Exploratory Wildcat Abo-Wolfcamp (97727)	
4. Location of Well (Report location clearly and in accordance with any State requirements.*) At surface ~~2310' FSL & 170' FWL~~ 2110/S & 370/W Sec. 9, T. 15 S., R. 31 E. Unit L	11. Sec., T. R. M. or Blk. and Survey or Area Sec. 9 - L, T. 15 S., R. 31 E.
See Amended Plat — At proposed prod. zone ~~1680' FSL & 330' FEL~~ 1980/S & 330' FEL, Sec. 9, T. 15 S., R. 31 E. Unit I	
14. Distance in miles and direction from nearest town or post office* Approx: (10 miles NNE of Maljamar, 50 miles NW of Artesia, 30 miles E of Hagerman), NM	12. County or Parish Chaves / 13. State NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) SHL 330' s. of unit E, SWNW, Sec.9 and 170' East of Sec 8,	16. No. of acres in lease 560.00	17. Spacing Unit dedicated to this well 160 acres
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 4800' WNW from anticipated well.	19. Proposed Depth 8,980 Ft.	20. BLM/BIA Bond No. on file NM 0877
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 4433 '	22. Approximate date work will start* 10/30/2009	23. Estimated duration 28 days

24. Attachments

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

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

25. Signature Vernon D. Dyer	Name (Printed/Typed) Vernon D. Dyer	Date 10/13/2009
Title Agent (Note: Please contact agent at (575) 420-0355 for any necessary changes or information required to this APD)		
Approved by (Signature) /S/ Angel Mayes	Name (Printed/Typed) Angel Mayes -	Date 12-7-09
Title Assistant Field Manager, Lands And Minerals	Office ROSWELL 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.

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 2)

*(Instructions on page 2)

KZ

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2009 OCT 15 PM 2:21
BUREAU OF LAND MGMT
ROSWELL FIELD OFFICE

United States of Department of the Interior

BUREAU OF LAND MANAGEMENT
Roswell Resource Area
2909 West Second St.
Roswell, NM 88201

Statement Accepting Responsibilities for Operations

Operator Name: **Marshall & Winston Incorporated**
Address: **P.O. Box 50880**
Midland, TX
79710-0880

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

Lease No: The BHL is on **NMNM 105886,** the SHL is on Private surface/minerals.
Lease Name: **Medlin Federal Com No 09-1 H.**
Legal Description of Land: **160 acre proration unit: N2/S2, Sec. 09, T.15 S., R. 31 E**

Formations applicable: **Wolfcamp - Abo**

Bond Coverage: **Statewide Bond**
BLM Bond File No.: **NM 0877**

Authorized Signature: Vernon D. Dyer

Title: Agent

Date: 10/13/2009

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

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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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
30-005-29113	97722	Wildcat Abo - Wolfcamp

Property Code	Property Name	Well Number
39909	MEDLIN FEDERAL COM	9-1H

OGRID No.	Operator Name	Elevation
14187	MARSHALL & WINSTON, INC.	4433'

Surface Location

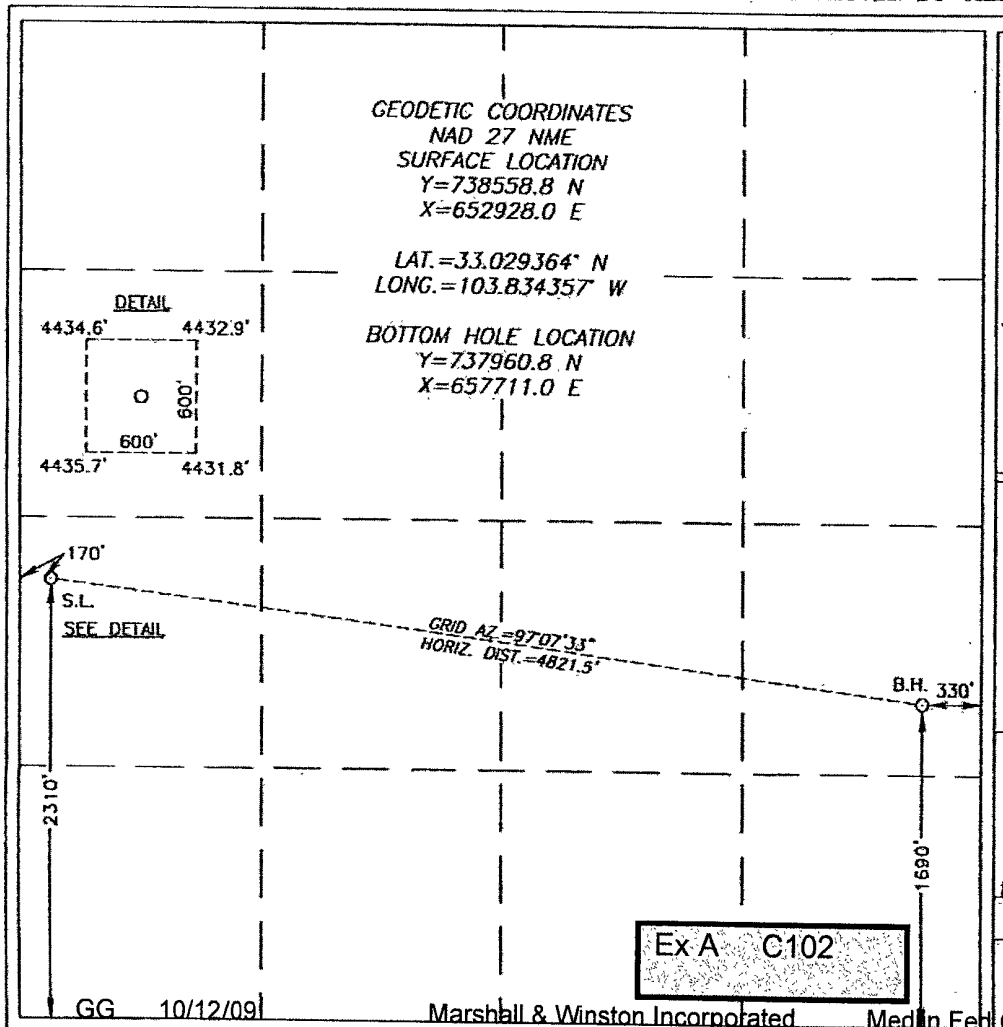
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	9	15-S	31-E		~~2310~~ 2110	SOUTH	370	WEST	CHAVES

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
I	9	15-S	31-E		~~1690~~ 1980	SOUTH	330	EAST	CHAVES

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION

I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Vernon D Dyer 10/13/09
Signature Date

VERNON D. DYER
Printed Name

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

SEPTEMBER 21, 2009
Date Surveyed

Signature & Seal 3239
Professional Surveyor

Ronald J. Eidson 9.30.09
09.11.0869

RONALD J. EIDSON NEW MEXICO 3239 REGISTERED PROFESSIONAL SURVEYOR

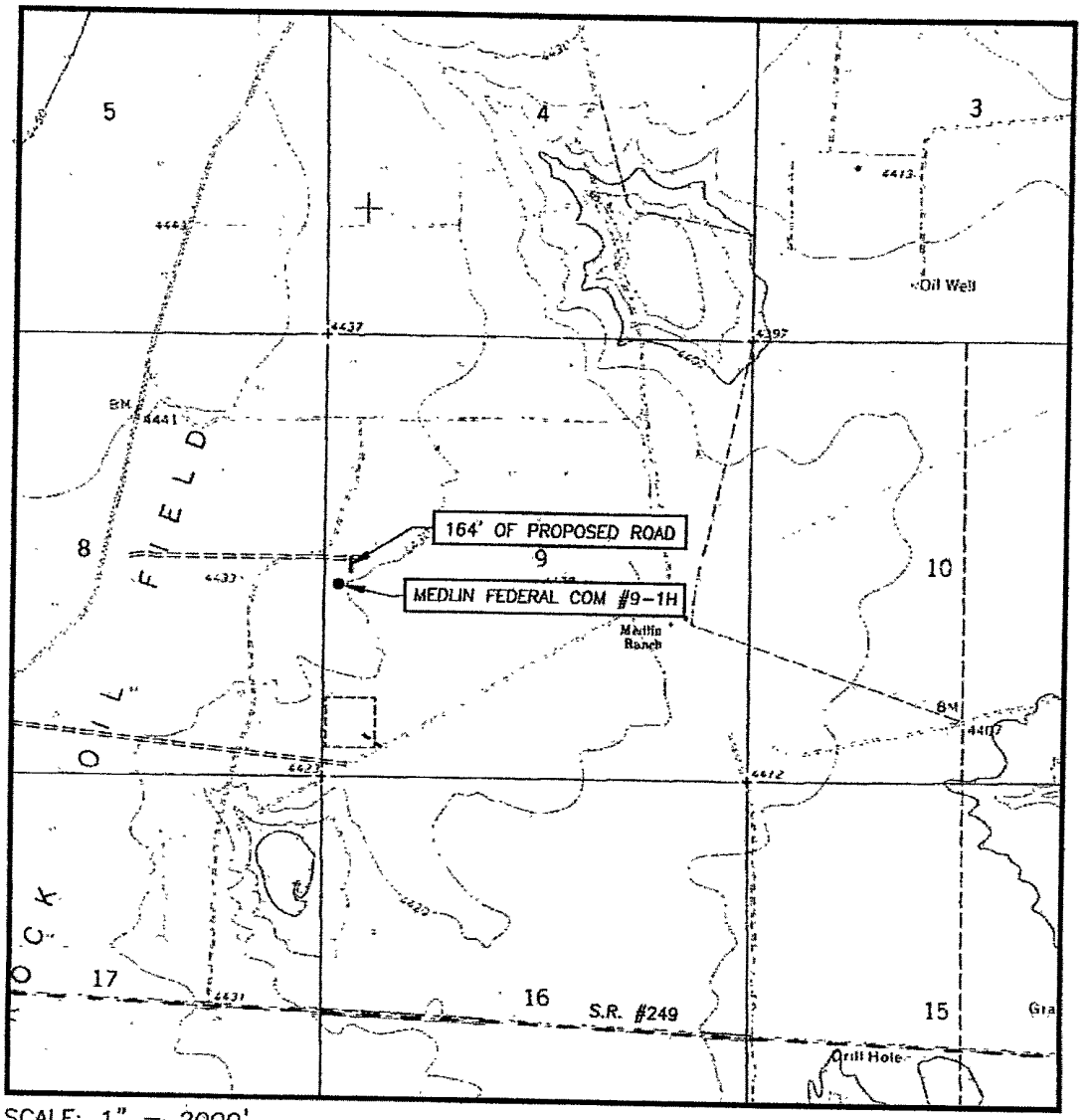
Certificate No. GARY EIDSON 12641
RONALD J. EIDSON 3239

Ex A C102

GG 10/12/09

See Amended C-102

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
CEDAR POINT SE, N.M. – 10'

SEC. 9 TWP. 15-S RGE. 31-E

SURVEY N.M.P.M.

COUNTY CHAVES STATE NEW MEXICO

DESCRIPTION 2310' FSL & 170' FWL

ELEVATION 4433'

OPERATOR MARSHALL & WINSTON, INC.

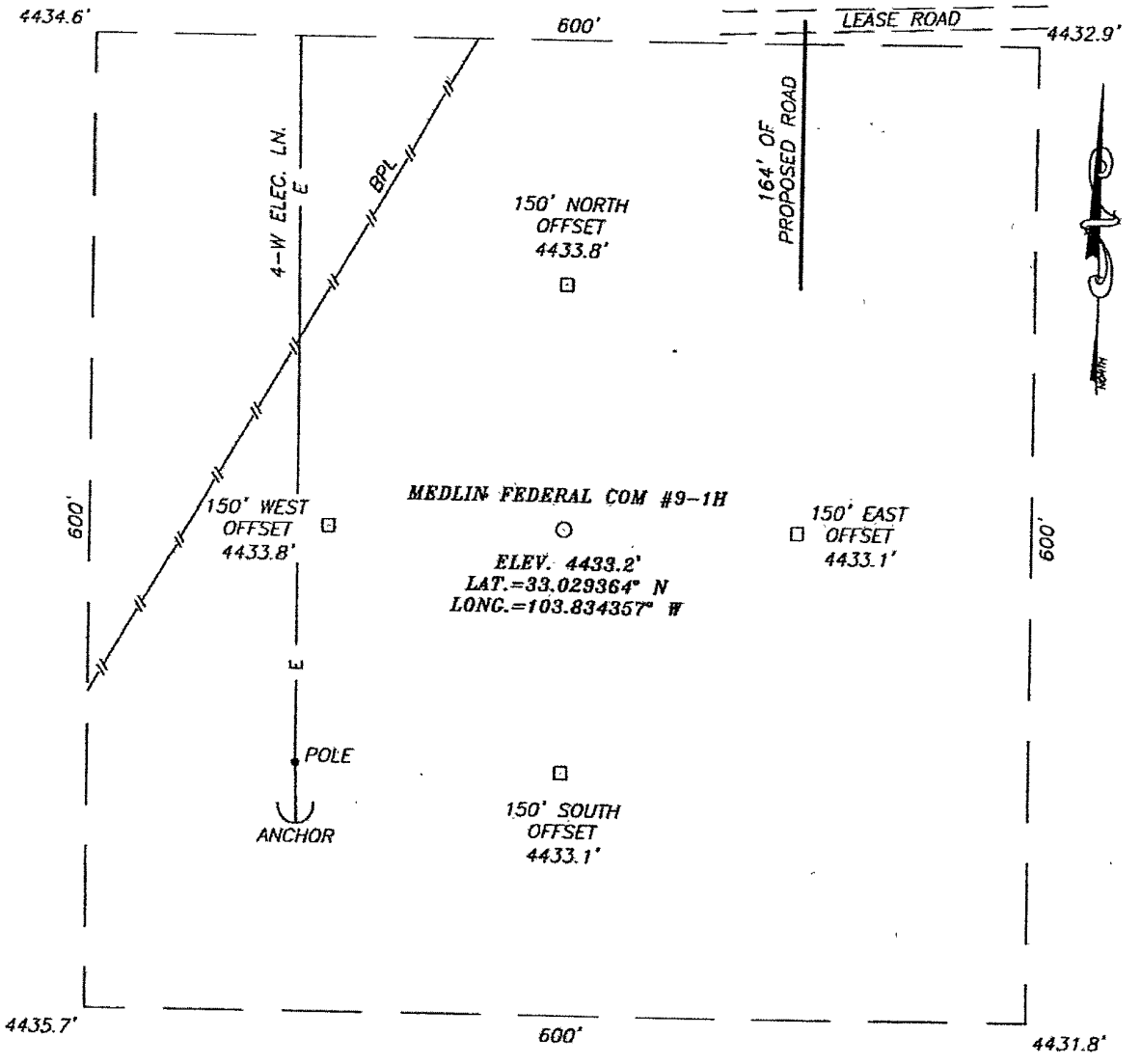
LEASE MEDLIN FEDERAL COM

U.S.G.S. TOPOGRAPHIC MAP
CEDAR POINT SE, N.M.

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(575) 393-3117

Exhibit B-1 Location Verification Map

SECTION 9, TOWNSHIP 15 SOUTH, RANGE 31 EAST, N.M.P.M.,
CHAVES COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF HWY. #249 AND HWY. #72, GO WEST ON HWY. #249 APPROX. 3.0 MILES. TURN RIGHT AND GO NORTH APPROX. 0.7 MILES TO A PROPOSED ROAD SURVEY. FOLLOW ROAD SURVEY EAST APPROX. 4693 FEET TO AN EXISTING TWO TRACK ROAD THEN NORTHEAST APPROX. 525 FEET, THEN NORTHWEST APPROX. 480 FEET TO THE MEDLIN FEDERAL COM #9-2H WELL, FROM THIS WELL GO SOUTH APPROX. 164 FEET TO THIS LOCATION.

Exhibit B-2
Access Roads

100 0 100 200 Feet
Scale:1"=100'

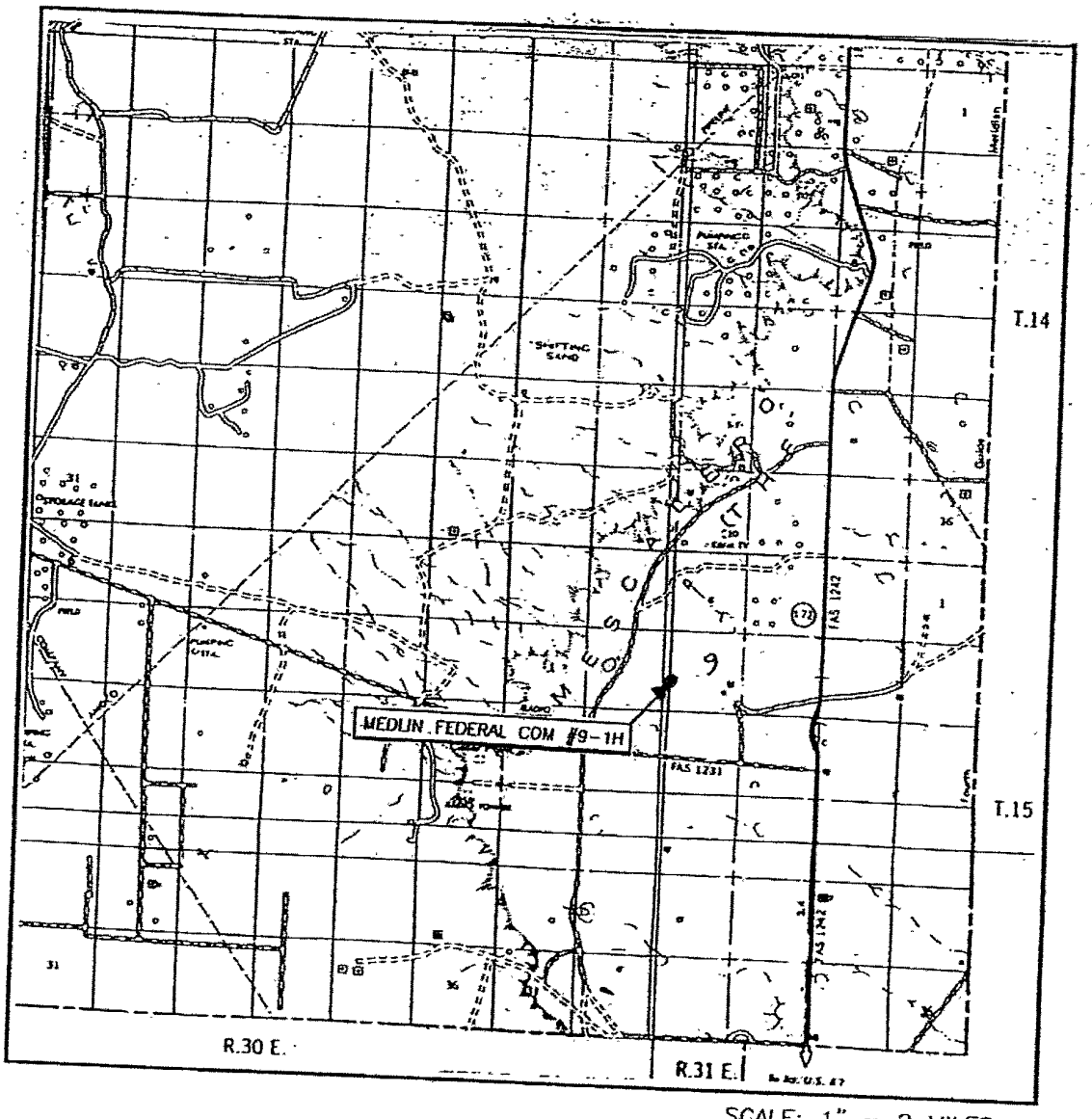
PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(575) 393-3117

MARSHALL & WINSTON, INC.

MEDLIN FEDERAL COM #9-1H WELL
LOCATED 2310 FEET FROM THE SOUTH LINE
AND 170 FEET FROM THE WEST LINE OF SECTION 9,
TOWNSHIP 15 SOUTH, RANGE 31 EAST, N.M.P.M.,
CHAVES COUNTY, NEW MEXICO.

Survey Date: 9/21/09	Sheet 1 of 1 Sheets		
W.O. Number: 09.11.0869	Dr By: LA		Rev 1:N/A
Date: 9/28/09		09110869	Scale:1"=100'

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 9 TWP. 15-S RGE. 31-E

SURVEY N.M.P.M.

COUNTY CHAVES STATE NEW MEXICO

DESCRIPTION 2310' FSL & 170' FWL

ELEVATION 4433'

OPERATOR MARSHALL & WINSTON, INC.

LEASE MEDLIN FEDERAL COM

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(575) 393-3117

Exhibit B-3
Vicinity Map

M / W

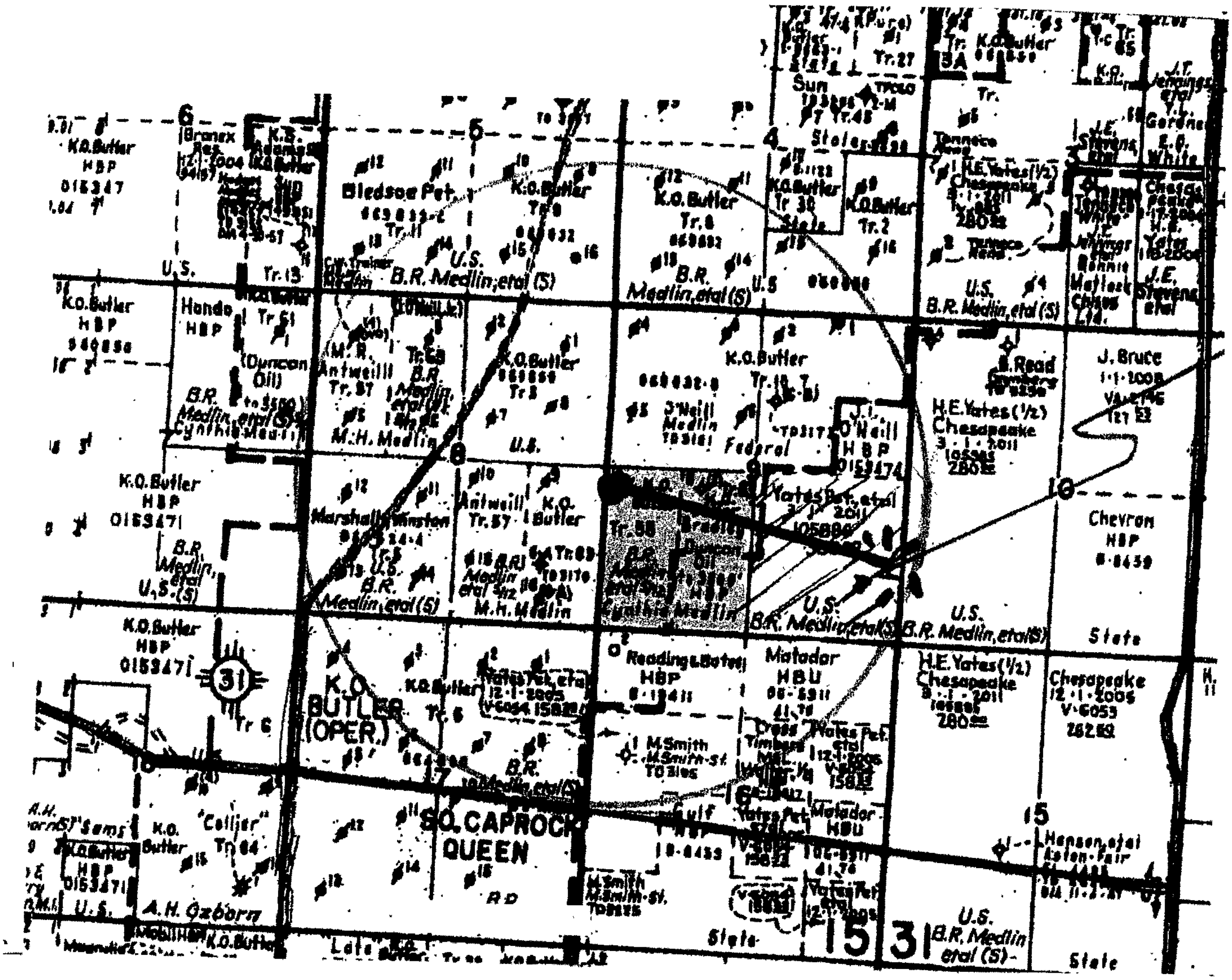
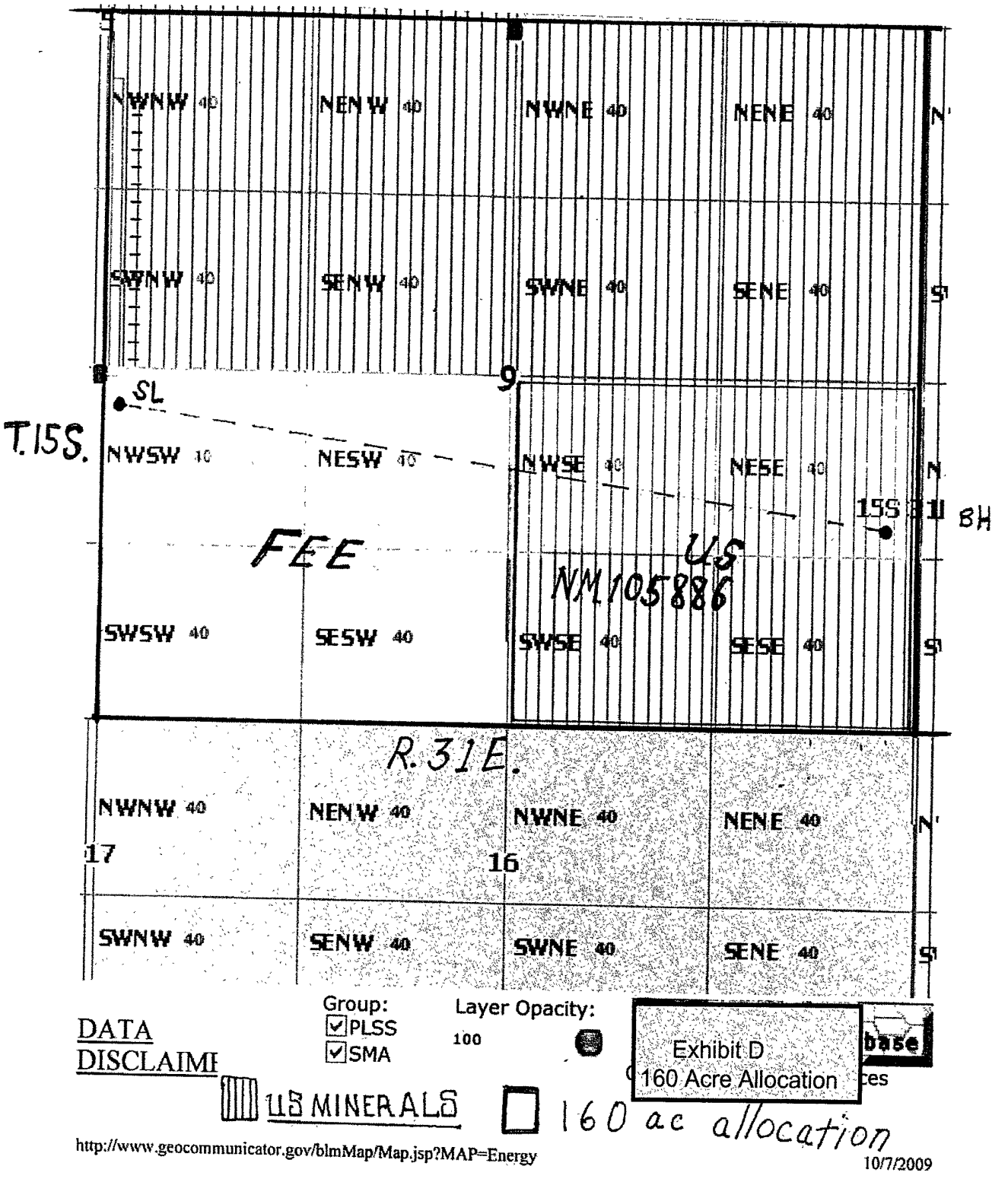


Exhibit C
1 mile radius

^•«, MedlinwHsn]


NWNW 40
NENW 40
NWNE 40
NENE 40
SWNW 40
SENW 40
SWNE 40
SENE 40
9
SL
T.15S.
NWSW 40
NESW 40
NWSE 40
NESE 40
15S
31
BH
FEE
US
NM105886
SWSW 40
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SWSE 40
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R.31E.
NWNW 40
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NWNE 40
NENE 40
17
16
SWNW 40
SENW 40
SWNE 40
SENE 40
Group:
PLSS
SMA
Layer Opacity:
100
Exhibit D
160 Acre Allocation
base
DATA
DISCLAIMI
US MINERALS
160 ac allocation
http://www.geocommunicator.gov/blmMap/Map.jsp?MAP=Energy
10/7/2009

DRILLING PROGNOSIS
Marshall & Winston Incorporated
Medlin Federal Com No. 9-1H
Chaves County, New Mexico

LOCATION:
SH: 2310' FSL & 170' FWL, Sec. 9, T-15-S, R-31-E, Chaves County, New Mexico.
BH: 1690' FSL & 330' FEL, Sec. 9, T-15-S, R-31-E, Chaves County, New Mexico.

ELEVATION: 4433' GL

GEOLOGIC NAME OF SURFACE FORMATION: Quaternary Alluvium Deposits

PROPOSED TD: est: 8700' to 8900' Abo-Wolfcamp

SURFACE OWNER: Bill Medlin

BLM LEASE NO.: **NMNM 105886**

DRILLING CONTRACTOR: Patriot Drilling.

CEMENTING SERVICES: BJ Services, Artesia (575) 746-3140

DRILLING MUD: **TBA**

CASING: **See Drilling Plan**

MUDLOGGER: Discovery Logging, Inc. (432) 687-1823. Vinnie Yakubanski (432) 682-6973
John Chirico (432) 699-0335

OPENHOLE LOGS: **See Drilling Plan**

WELLHEAD EQUIPMENT: Downing Wellhead, Inc. (432) 687-0778 George Yielding

WATER HAULER: **N/A**

FENCING: Fas-Line – Sandy 800-281-5988

FLOAT EQUIPMENT: Weatherford – Artesia (575) 746-8882 Dennis Potter

DRILLING PROCEDURE:

1. Set 70' of 20"conductor pipe and cement to surface.
2. MIRU Patriot. ***Notify BLM – Roswell of intent to spud and of all casing, cementing and BOP tests.***
3. Drill 17-1/2" hole and set 13 3/8" casing at 340' & cement to surface per BJ well recommendation. Notify BLM if cement does not circ. to surface.
4. Wait on cement for 18 hrs. NU 3000# casing head and BOP. Test head to 2000#. Test BOP to 2000#.
5. Drill 12-1/4" hole and set 9-5/8" casing to 3950' and cement to surface per BJ well recommendation. Notify BLM if cement does not circ. to surface.
6. Mudlogger will be on hole below 9- 5/8" casing.
7. Rig up H2S equipment.
8. Drill 8-3/4" hole to 9100' TVD.
9. Run Open Hole Logs from 9100' to intermediate casing.
10. When logs are run successfully set a cement plug from 8300' to 7800'.
11. Trip out of hole and make up 8-3/4" directional BHA to build curve.
12. Trip in hole and kick off curve at 8250' unless changed due to open hole logs.
13. Drill curve and land at 8700' TVD 8974' TMD.
14. Run 7" casing and cement from bottom to 3450' (500' above intermediate) as per BJ well recommendation.
15. Drill a 6-1/8" hole to TD, 8700' TVD 13125 MD.
16. Run 4 ½" liner with packer and sleeve assembly to TD and hang liner at about 8100' (150' above KOP).

MUD PROGRAM:

0 - 340'	Fresh water mud	8.4 – 8.6 PPG
340' – 3950'	Brine water	10.0 – 10.1 PPG
3950' - 8974'	Fresh water & Brine	8.6- 9.5 PPG
8974' – 13,125'	2% KCL	8.4 – 8.9 PPG

Mud system will be a closed looped system.

ESTIMATED FORMATION TOPS:

Yates	2,460'
Queen	3,250'
San Andres	3,940'
Abo Shale	7,380'
Lower Abo Dolomite	8,595'
Wolfcamp LS	8,725'

CASING PROGRAM: SEE ALSO DRILLING PROGRAM

O.D., In	Depth, MD	Weight, Lb/ft	Grade	Conn	Pw Collapse Psi SF = 1.125	Pw Burst Psi SF = 1.0	Pw Tension, Kips SF = 1.8	Test, Psi
13-3/8"	Surface To 340'	48.0	N-80	STC	770	1,730	322	2,000
9-5/8"	Surface To 3,950'	36.0	J-55	STC	2,020	3,520	394	1,500
7"	Surface To 8,974'	26.0	P-110	LTC	6,210	9,960	693	1,500
4-1/2"	Surface To 13,250	11.6	P-110	LTC	7,560	10,690	279	1,500

LOGGING PROGRAM:

Mud logging	2 man unit from 3950' to TD
Electric Logging	DST / CNL / LDT / CAL / GR, DLL / GR / Borehole Imaging Log
Coring	Side wall cores in Pilot Hole

POTENTIAL HAZARDS:

No abnormal pressures or temperatures are anticipated. (BHP 4000 psi, BHT 175 deg)
The area has a potential for H2S and the following measures will be taken:

- all personnel will be H2S trained and qualified
- H2S alarms and detection systems will be utilized
- A windsock will be visible at all times
- Flags or warning signs will be visible for road traffic

Indian Fire and Safety, 3317 N.W. Country Rd., Hobbs, NM will deliver the onsite H2S Safety Packet prior to drilling below the 9 5/8" casing shoe. A H2S Contingency Plan will be submitted and delivered to the rig at that time and will conform to the NMOCD and Onshore Order regulations.

COMPANY PERSONNEL:

Otis Holt (Wellsite Supervisor) 325-206-1528 (c)

Gabe Herrera (Marshall & Winston – Engineer) 432-684-6373 (o)
432-260-8650 (c)

Tom Brandt (Marshall & Winston – Operations) 432-684-6373 (o)
432-553-9747 (c)

George Watters (Marshall & Winston – Geologist) 432-684-6373 (o)
432-631-2051 (c)

Marshall & Winston, Inc.
P.O. Box 50880
Midland, Tx. 79710-0880

432-684-6373 Office
432-687-2684 Fax

DIRECTIONS TO LOCATION:

From the intersection of NM State HWY 249 and 172 heading West on HWY 249 go approx. 3.0 miles. Turn right and go North approx. 0.7 miles to a proposed road survey. Follow Road survey east approx. 4693 feet to an existing two track road then northeast approx. 525 feet, the northwest approx. 480 feet to the Medlin Federal Com 9-1H well, from this well go south approx. 164 feet to this location. SEE Exhibit B-2.

Lessee's or Operator's Representative and Certification.

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by Marshall & Winston Incorporated and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.
Date October 13, 2009
Name and Title: Vernon D. Dyer / Agent

Marshall & Winston Incorporated
P.O. Box 50880
Midland, TX 79710-0880
(432) 684-6373

Drilling Manager Contact
Gabe Herrera
(432) 684-6373

Proposal No: 556450998A

Marshall & Winston, Inc.
Medlin Fed Com 9-1H

Chaves County, New Mexico
October 7, 2009

Well Proposal

Prepared for:
Mr. Gabe Herrera

Prepared by:
Michael Beggs
Region Engineer
Midland, Texas

THE BLUE WELLBORE℠
Makes better wells

Service Point:
Artesia
Bus Phone: (505) 746-3140
Fax: (505) 746-2293

Service Representatives:
Bubba Sullivan
Manager, City Sales
Odessa, Texas

Operator Name: Marshall & Winston, Inc.
Well Name: Medlin Fed Com 9-1H
Job Description: 13-3/8" Conductor Casing
Date: October 7, 2009

Proposal No: 556450998A

WELL DATA

ANNULAR GEOMETRY

ANNULAR I.D. (in)	DEPTH(ft)	
	MEASURED	TRUE VERTICAL
17.500 HOLE	340	340

SUSPENDED PIPES

DIAMETER (in)		WEIGHT (lbs/ft)	DEPTH(ft)	
O.D.	I.D.		MEASURED	TRUE VERTICAL
13.375	12.715	48	340	340

Float Collar set @	300 ft
Mud Density	10.00 ppg
Mud Type	Brine Based
Est. Static Temp.	82 ° F
Est. Circ. Temp.	80 ° F

VOLUME CALCULATIONS

340 ft	x	0.6946 cf/ft	with	100 % excess	=	472.4 cf
40 ft	x	0.8818 cf/ft	with	0 % excess	=	35.3 cf (inside pipe)
				TOTAL SLURRY VOLUME	=	507.6 cf
					=	90 bbls

TOC = 0 ft

Operator Name: Marshall & Winston, Inc.
Well Name: Medlin Fed Com 9-1H
Job Description: 13-3/8" Conductor Casing
Date: October 7, 2009

Proposal No: 556450998A

FLUID SPECIFICATIONS

FLUID	VOLUME CU-FT	VOLUME FACTOR	AMOUNT AND TYPE OF CEMENT
Cement Slurry	508	/ 1.3	= 380 sacks Premium Plus C Cement + 0.005 lbs/sack Static Free + 2% bwoc Calcium Chloride + 0.25 lbs/sack Cello Flake + 0.005 gps FP-6L + 56.2% Fresh Water
Displacement			47.1 bbls Displacement Fluid

CEMENT PROPERTIES

	SLURRY NO. 1
Slurry Weight (ppg)	14.80
Slurry Yield (cf/sack)	1.35
Amount of Mix Water (gps)	6.34
Amount of Mix Fluid (gps)	6.34

Operator Name: Marshall & Winston, Inc.
Well Name: Medlin Fed Com 9-1H
Job Description: 9-5/8" Intermediate Casing
Date: October 7, 2009

Proposal No: 556450998A

WELL DATA

ANNULAR GEOMETRY

ANNULAR I.D. (in)	DEPTH(ft)	
	MEASURED	TRUE VERTICAL
12.715 CASING	340	340
12.250 HOLE	3,950	3,950

SUSPENDED PIPES

DIAMETER (in)		WEIGHT (lbs/ft)	DEPTH(ft)	
O.D.	I.D.		MEASURED	TRUE VERTICAL
9.625	9.001	32.3	3,950	3,950

Float Collar set @	3,910 ft
Mud Density	9.50 ppg
Mud Type	Brine Based
Est. Static Temp.	106 ° F
Est. Circ. Temp.	98 ° F

VOLUME CALCULATIONS

340 ft	x	0.3765 cf/ft	with	0 % excess	=	128.0 cf
2,810 ft	x	0.3132 cf/ft	with	100 % excess	=	1760.1 cf
800 ft	x	0.3132 cf/ft	with	50 % excess	=	375.8 cf
40 ft	x	0.4419 cf/ft	with	0 % excess	=	17.7 cf (inside pipe)
				TOTAL SLURRY VOLUME	=	2281.6 cf
					=	407 bbls

TOC Lead: 0 ft
TOC Tail: 3150 ft

Operator Name: Marshall & Winston, Inc.
Well Name: Medlin Fed Com 9-1H
Job Description: 9-5/8" Intermediate Casing
Date: October 7, 2009

Proposal No: 556450998A

FLUID SPECIFICATIONS

FLUID	VOLUME CU-FT	VOLUME FACTOR	AMOUNT AND TYPE OF CEMENT
Lead Slurry	1888	/ 2.4	= 770 sacks (50:50) Poz (Fly Ash):Premium Plus C Cement + 0.005 lbs/sack Static Free + 5% bwow Sodium Chloride + 0.25 lbs/sack Cello Flake + 5 lbs/sack LCM-1 + 0.005 gps FP-6L + 10% bwoc Bentonite + 134.7% Fresh Water
Tail Slurry	394	/ 1.3	= 295 sacks Premium Plus C Cement + 0.005 lbs/sack Static Free + 1% bwoc Calcium Chloride + 0.25 lbs/sack Cello Flake + 0.005 gps FP-6L + 56.1% Fresh Water
Displacement			307.7 bbls Displacement Fluid

CEMENT PROPERTIES

	SLURRY NO. 1	SLURRY NO. 2
Slurry Weight (ppg)	11.80	14.80
Slurry Yield (cf/sack)	2.45	1.34
Amount of Mix Water (gps)	13.57	6.33
Amount of Mix Fluid (gps)	13.57	6.33

Operator Name: Marshall & Winston, Inc.
Well Name: Medlin Fed Com 9-1H
Job Description: Kickoff Plug
Date: October 7, 2009

Proposal No: 556450998A

FLUID SPECIFICATIONS

Pre-Flush — 20.0 bbls Surfactant Wash

Spacer — = 10.0 bbls Fresh Water @ 8.34 ppg

PLUG NO.	VOLUME CU-FT		VOLUME FACTOR	AMOUNT AND TYPE OF CEMENT
1	316	/	.9	= 350 sacks Class H Cement + 0.005 lbs/sack Static Free + 5% bwow Sodium Chloride + 1.2% bwoc CD-31 + 0.005 gps FP-6L + 26.7% Fresh Water

CEMENT PROPERTIES

	PLUG NO. 1
Slurry Weight (ppg)	18.00
Slurry Yield (cf/sack)	0.90
Amount of Mix Water (gps)	3.01
Amount of Mix Fluid (gps)	3.01

PLUG GEOMETRY

	PLUG TOP		PLUG BOTTOM	
1	8600 ft	to	9100 ft	with 8.75 inch Open Hole

Operator Name: Marshall & Winston, Inc.
Well Name: Medlin Fed Com 9-1H
Job Description: 7" Production Casing
Date: October 7, 2009

Proposal No: 556450998A

WELL DATA

ANNULAR GEOMETRY

ANNULAR I.D. (in)	DEPTH(ft)	
	MEASURED	TRUE VERTICAL
9.001 CASING	3,950	3,950
8.750 HOLE	8,905	8,700

SUSPENDED PIPES

DIAMETER (in)		WEIGHT (lbs/ft)	DEPTH(ft)	
O.D.	I.D.		MEASURED	TRUE VERTICAL
7.000	6.094	32	8,905	8,700

Float Collar set @	8,865 ft
Mud Density	8.90 ppg
Est. Static Temp.	141 ° F
Est. Circ. Temp.	128 ° F

VOLUME CALCULATIONS

500 ft	x	0.1746 cf/ft	with	0 % excess	=	87.3 cf
3,550 ft	x	0.1503 cf/ft	with	50 % excess	=	800.5 cf
1,405 ft	x	0.1503 cf/ft	with	50 % excess	=	316.8 cf
40 ft	x	0.2026 cf/ft	with	0 % excess	=	8.1 cf (inside pipe)
				TOTAL SLURRY VOLUME	=	1212.7 cf
					=	216 bbls

TOC Lead: 3450 ft
TOC Tail: 7500 ft

Operator Name: Marshall & Winston, Inc.
Well Name: Medlin Fed Com 9-1H
Job Description: 7" Production Casing
Date: October 7, 2009

Proposal No: 556450998A

FLUID SPECIFICATIONS

Pre-Flush

Spacer — 10.0 bbls Fresh Water @ 8.34 ppg

FLUID	VOLUME CU-FT	VOLUME FACTOR	AMOUNT AND TYPE OF CEMENT
Lead Slurry	888	/ 2.4	= 365 sacks (50:50) Poz (Fly Ash):Premium Plus H Cement + 0.125 lbs/sack Cello Flake + 5 lbs/sack LCM-1 + 10% bwoc Bentonite + 0.2% bwoc FL-52A
Tail Slurry	325	/ 1.1	= 275 sacks Premium Plus H Cement + 1% bwoc FL-62 + 0.4% bwoc FL-52A + 45.8% Fresh Water

Displacement — 319.8 bbls Displacement

CEMENT PROPERTIES

	SLURRY NO. 1	SLURRY NO. 2
Slurry Weight (ppg)	11.60	15.60
Slurry Yield (cf/sack)	2.45	1.19
Amount of Mix Water (gps)	13.73	5.16

SLURRIES WILL BE TESTED BEFORE PUMPING JOB.

WELL DATA

ANNULAR GEOMETRY

ANNULAR I.D. (in)	DEPTH(ft)	
	MEASURED	TRUE VERTICAL
6.094 CASING	8,905	8,700
6.125 HOLE	13,366	8,700

SUSPENDED PIPES

DIAMETER (in)		WEIGHT (lbs/ft)	DEPTH(ft)	
O.D.	I.D.		MEASURED	TRUE VERTICAL
4.500	4.000	11.6	13,366	8,700

Drill Pipe 3.5 (in) OD, 2.764 (in) ID, 13.3 (lbs/ft) set @	8,190 ft
Drill Pipe 4.5 (in) OD, 4.0 (in) ID, 11.6 (lbs/ft) set @	13,366 ft
Depth to Top of Liner	8,190 ft
Float Collar set @	13,366 ft
Mud Density	8.80 ppg
Mud Type	Water Based
Est. Static Temp.	145 ° F
Est. Circ. Temp.	128 ° F

VOLUME CALCULATIONS

715 ft	x	0.0921 cf/ft	with	0 % excess	=	66 cf
4,461 ft	x	0.0942 cf/ft	with	110 % excess	=	882 cf
				TOTAL SLURRY VOLUME	=	948 cf
					=	169 bbls

TOC: 8190 ft

Operator Name: Marshall & Winston, Inc.
Well Name: Medlin Fed Com 9-1H
Job Description: 4-1/2" Liner
Date: October 7, 2009

Proposal No: 556450998A

FLUID SPECIFICATIONS

Pre-Flush

Spacer — 10.0 bbls Fresh Water @ 8.34 ppg

FLUID	VOLUME CU-FT	VOLUME FACTOR	AMOUNT AND TYPE OF CEMENT
Cement Slurry	948	/ 1.3	= 712 sacks (50:50) Poz (Fly Ash):Class H Cement + 3% bwow Sodium Chloride + 0.1% bwoc R-3 + 0.2% bwoc CD-32 + 2% bwoc Bentonite + 0.3% bwoc Sodium Metasilicate + 0.5% bwoc FL-52A + 61.2% Fresh Water

Displacement — 141.2 bbls Displacement

CEMENT PROPERTIES

	SLURRY NO. 1
Slurry Weight (ppg)	14.00
Slurry Yield (cf/sack)	1.33
Amount of Mix Water (gps)	6.16
Estimated Pumping Time - 70 BC (HH:MM)	3:15
Free Water (mls) @ ° F @ 45 ° angle	0.0
Fluid Loss (cc/30min) at 1000 psi and 145 ° F	212.0

RHEOLOGIES

FLUID		TEMP	600	300	200	100	6	3
Cement Slurry	@	80 ° F	142	92	73	52	15	10
Cement Slurry	@	145 ° F	105	78	62	46	16	10

Conduct Field Blend tests prior to the job. Email resullts to Mike Beggs.

Customer has requested:

-Thickening time range: 3-3.5 hrs

-0 Free water

-Fluid Loss: 200-500 cc's

CONDITIONS

BJ Services' performance of services and sale of materials is expressly conditioned upon the applicability of the Terms and Conditions contained in the current BJ Services Price Book. The Terms and Conditions include, among other things, an indemnity in favor of BJ Services from Customer for damage to the well bore, reservoir damage, loss of the hole, blowouts and loss of control of the well, even if caused by the negligence or other fault of BJ Services. The Terms and Conditions also limit the warranties provided by the BJ Services and the remedies to which Customer may be entitled in the event of a breach of warranty by BJ Services. For these reasons, we strongly recommend that you carefully review a copy of the Terms and Conditions. **If you do not have a copy of the BJ Services Price Book, you can view the Terms and Conditions on BJ Services Web Site, www.bjservices.com. By requesting that BJ Services perform the services described herein, Customer acknowledges that such Terms and Conditions are applicable to the services. Further, by requesting the services, Customer warrants that its representative on the well location or other service site will be fully authorized to acknowledge such Terms and Conditions by executing a Field Receipt or other document presented by BJ Services containing such Terms and Conditions.**

In the event that Customer and BJ Services have executed a Master Services Agreement covering the work to be performed, such Master Services Agreement shall govern in place of the Terms and Conditions. If you are interested in entering into Master Services Agreement with BJ Services, please contact us through the "Go BJ" button on the BJ Services Web Site.

PRODUCT DESCRIPTIONS

Bentonite
Commonly called gel, it is a clay material used as a cement extender and to control excessive free water.

CD-31
A free flowing high molecular weight dispersant used to lower slurry viscosity and help provide turbulent flow properties at reduced pump rates. CD-31 also assists in fluid loss control.

CD-32
A patented, free-flowing, water soluble polymer that is an efficient and effective dispersant for primary and remedial cementing.

Calcium Chloride
A powdered, flaked or pelletized material used to decrease thickening time and increase the rate of strength development.

Cello Flake
Graded (3/8 to 3/4 inch) cellophane flakes used as a lost circulation material.

Class H Cement
Class H cement is an API type, all purpose oil well cement which is used without modification in wells up to 8,000 ft. It possesses a moderate sulfate resistance. With the use of accelerators or retarders, it can be used in a wide range of well depths and temperatures.

FL-52A
A water soluble, high molecular weight fluid loss additive used in medium to low density slurries. It is functional from low to high temperature ranges.

FL-62
A patented dry blend of water soluble polymers that are formulated to control the loss of fluid during cementing operations. A dispersant and bonding additive are proportioned to deliver consistent performance and control fluid loss in primary and squeeze cementing applications at low to moderate temperatures.

FP-6L
A clear liquid that decreases foaming in slurries during mixing.

LCM-1
A graded (8 to 60 mesh) naturally occurring hydrocarbon, asphaltite. It is used as a lost circulation material at low to moderate temperatures and will act as a slurry extender. Cement compressive strength is reduced.

Poz (Fly Ash)
A synthetic pozzolan, (primarily Silicon Dioxide). When blended with cement, Pozzolan can be used to create lightweight cement slurries used as either a filler slurry or a sulfate resistant completion cement.

Premium Plus H Cement
Class H cement is an API type, all purpose oil well cement which is used without modification in wells up to 8,000 ft. It possesses a moderate sulfate resistance. With the use of accelerators or retarders, it can be used in a wide range of well depths and temperatures.

PRODUCT DESCRIPTIONS (Continued)

R-3
A low temperature retarder used in a wide range of slurry formulations to extend the slurry thickening time.

S-150
A blend of amphoteric and nonionic surfactants, recommended for use in water based stimulation treatments.

Sodium Chloride
At low concentrations, it is used to protect against clay swelling. At high concentrations, it is used to increase the

Sodium Metasilicate
An extender used to produce an economical, low density cement slurry.

Static Free
An anti-static additive used to prevent air entrainment due to agglomerated particles. Can be used in Cementing and Fracturing operations to aid in the flow of dry materials.

RIG PLAT

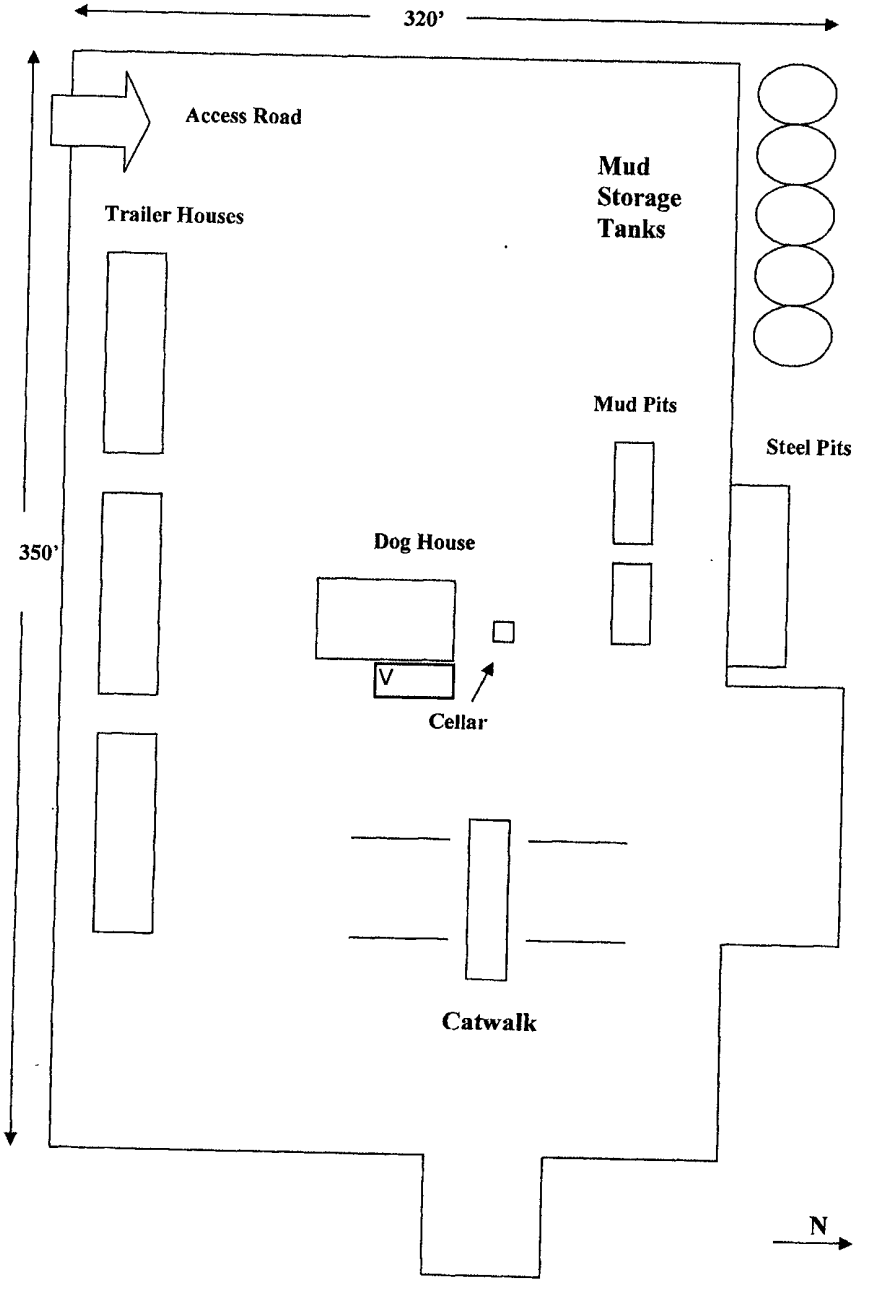
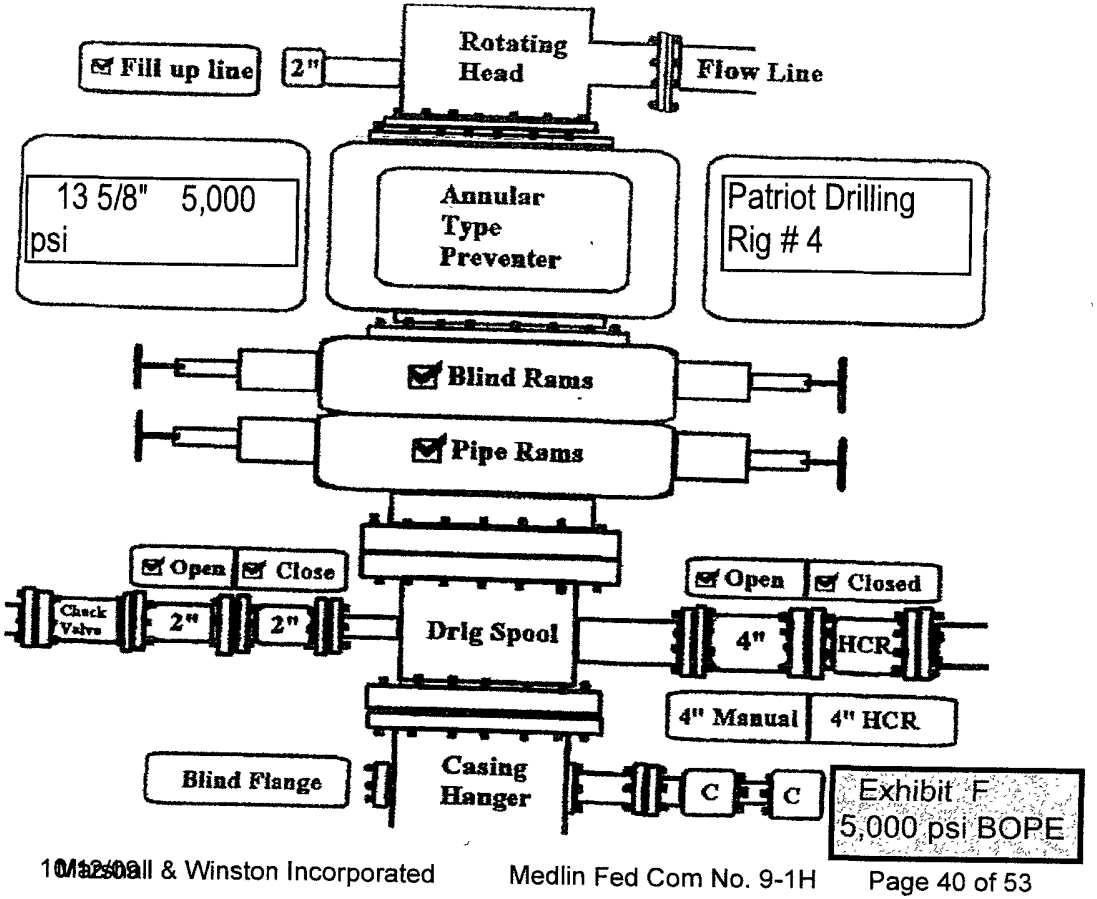


Exhibit E
Rig Layout
Patriot Drilling


Fill up line
2"
Rotating Head
Flow Line
13 5/8" 5,000 psi
Annular Type Preventer
Patriot Drilling Rig # 4
Blind Rams
Pipe Rams
Open
Close
Check Valve
2"
2"
Drlg Spool
Open
Closed
4"
HCR
4" Manual
4" HCR
Blind Flange
Casing Hanger
C
C
Exhibit F
5,000 psi BOPE

Emergency Procedures

In the case of a release of gas containing H2S, the first responder(s) must isolate the area and prevent entry by other persons into the 100 ppm ROE. Additionally the first responder(s) must evacuate any public places encompassed by the 100 ppm ROE, First responder(s) must take care not to injure themselves during this operation. Marshall and Winston Inc. and/or local officials must be contacted to aid in this operation. Evacuation of the public should be beyond the 100 ppm ROE.

All responders must have training in the detection of H2S, measures for protection against the gas, equipment used for protection and emergency response. Additionally, responders must be equipped with H2S monitors and air packs in order to control the release. Use the "buddy system' to ensure no injuries during the response.

Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO2). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved, NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas

Characteristics of H_2S and S02:

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H_2S	1.189 Air = 1.0	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	$S0_2$	2.21 Air = 1.0	2 ppm	N/A	1000 ppm

Contacting Authorities

Marshall and Winston Inc.'s personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available. The following call list of essential and potential responders has been prepared for use during a release. Marshall and Winston Inc.'s response must be in coordination with the State of New Mexico's 'Hazardous Materials Emergency Response Plan' (HMER)

Marshall & Winston, INC

Location Chaves County, NM
Field. (Medlin 9) Sec 9, T15S, R31E
Facility: Medlin Fed Com 9 No. 1H

Slot: No. 1H SHL
Well No. 1H
Wellbore: No. 1H PWB

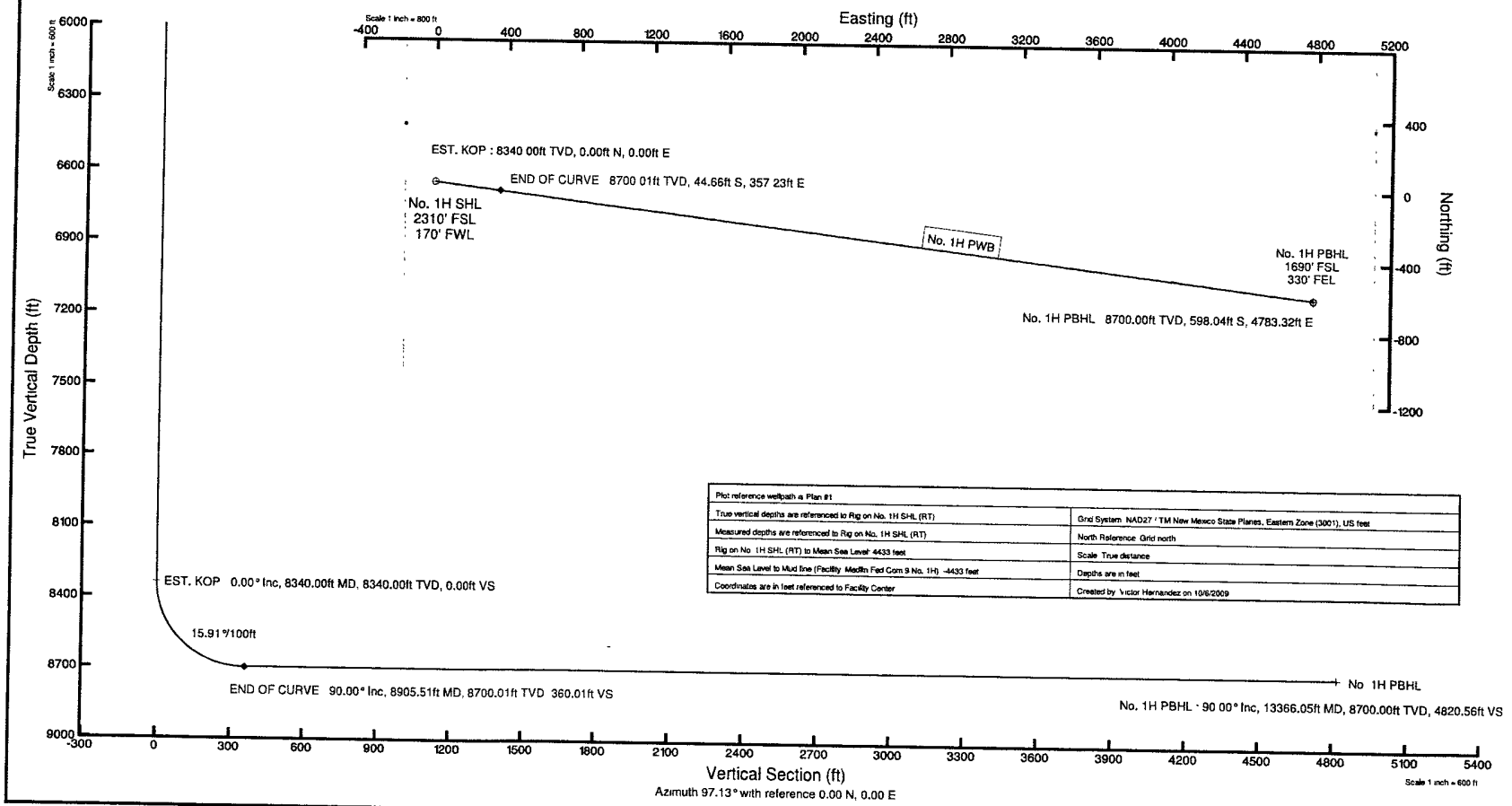
BAKER HUGHES INTEQ

N GRID
W E

BGGM (1945 0 to 2011 0) Dip 60 85° Field 49293 7 nT
Magnetic North is 8 03 degrees East of True North (at 10/6/2009)
Grid North is 0 27 degrees East of True North
To correct azimuth from True to Grid subtract 0 27 degrees
To correct azimuth from Magnetic to Grid add 7 75 degrees
For example if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7 75 = 97 75

Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	0.00	0.000	97.126	0.00	0.00	0.00	0.00	0.00
EST. KOP	8340.00	0.000	97.126	8340.00	0.00	0.00	0.00	0.00
END OF CURVE	8905.51	90.000	97.126	8700.01	-44.66	357.23	15.91	360.01
No. 1H PBHL	13366.05	90.000	97.126	8700.00	-598.04	4783.32	0.00	4820.56



Plot reference wellpath is Plan #1	
True vertical depths are referenced to Rig on No. 1H SHL (RT)	Grid System: NAD27 / TM New Mexico State Planes, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on No. 1H SHL (RT)	North Reference: Grid north
Rig on No. 1H SHL (RT) to Mean Sea Level: 4433 feet	Scale: True distance
Mean Sea Level to Mud line (Facility: Medlin Fed Com 9 No. 1H): 4433 feet	Depths are in feet
Coordinates are in feet referenced to Facility Center	Created by: Victor Hernandez on 10/6/2009

Planned Wellpath Report

Plan #1

Marshall & Winston, Inc.

BAKER HUGHES INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Marshall & Winston, INC**	Slot	**No. 1H SHL**
Area	**Chaves County, NM**	Well	**No. 1H**
Field	**(Medlin 9) Sec 9, T15S, R31E**	Wellbore	**No. 1H PWB**
Facility	**Medlin Fed Com 9 No. 1H**		

REPORT SETUP INFORMATION			
Projection System	**NAD27 / TM New Mexico State Planes, Eastern Zone (3001), US feet**	Software System	**WellArchitect® 2.0**
North Reference	**Grid**	User	**Victor Hernandez**
Scale	**0.999936**	Report Generated	**10/6/2009 at 3:58:49 PM**
Convergence at slot	**0.27° East**	Database/Source file	**WA_Midland/No._1H_PWB.xml**

WELLPATH LOCATION	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	**0.00**	**0.00**	652928.00	738558.80	33°01'45.710"N	103°50'03.684"W
Facility Reference Pt			**652928.00**	**738558.80**	33°01'45.710"N	103°50'03.684"W
Field Reference Pt			**653095.50**	**736910.00**	33°01'29.388"N	103°50'01.809"W

WELLPATH DATUM			
Calculation method	**Minimum curvature**	Rig on No. 1H SHL (RT) to Facility Vertical Datum	**0.00ft**
Horizontal Reference Pt	**Facility Center**	Rig on No. 1H SHL (RT) to Mean Sea Level	**4433.00ft**
Vertical Reference Pt	**Rig on No. 1H SHL (RT)**	Facility Vertical Datum to Mud Line (Facility)	**0.00ft**
MD Reference Pt	**Rig on No. 1H SHL (RT)**	Section Origin	**N 0.00, E 0.00 ft**
Field Vertical Reference	**Mean Sea Level**	Section Azimuth	**97.13°**

Planned Wellpath Report

Plan #1

BAKER HUGHES INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Marshall & Winston, INC	Slot	No. 1H SHL
Area	Chaves County, NM	Well	No. 1H
Field	(Medlin 9) Sec 9, T15S, R31E	Wellbore	No. 1H PWB
Facility	Medlin Fed Com 9 No. 1H		

WELLPATH DATA (54 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00	0.000	97.126	0.00	0.00	0.00	0.00	652928.00	738558.80	33°01'45.710"N	103°50'03.684"W	0.00	Tie On
8340.00	0.000	97.126	8340.00	0.00	0.00	0.00	652928.00	738558.80	33°01'45.710"N	103°50'03.684"W	0.00	EST. KOP
8440.00†	15.915	97.126	8438.72	13.80	-1.71	13.69	652941.69	738557.09	33°01'45.692"N	103°50'03.523"W	15.91	
8540.00†	31.830	97.126	8529.87	54.14	-6.72	53.72	652981.72	738552.08	33°01'45.641"N	103°50'03.053"W	15.91	
8640.00†	47.745	97.126	8606.37	117.93	-14.63	117.02	653045.01	738544.17	33°01'45.560"N	103°50'02.310"W	15.91	
8740.00†	63.660	97.126	8662.63	200.28	-24.85	198.73	653126.71	738533.96	33°01'45.455"N	103°50'01.351"W	15.91	
8840.00†	79.575	97.126	8694.07	294.87	-36.58	292.59	653220.57	738522.22	33°01'45.334"N	103°50'00.250"W	15.91	
8905.51	90.000	97.126	8700.01	360.01	-44.66	357.23	653285.21	738514.14	33°01'45.251"N	103°49'59.491"W	15.91	END OF CURVE
8940.00†	90.000	97.126	8700.01	394.51	-48.94	391.46	653319.43	738509.86	33°01'45.207"N	103°49'59.089"W	0.00	
9040.00†	90.000	97.126	8700.01	494.51	-61.35	490.69	653418.65	738497.46	33°01'45.080"N	103°49'57.924"W	0.00	
9140.00†	90.000	97.126	8700.01	594.51	-73.75	589.91	653517.88	738485.05	33°01'44.953"N	103°49'56.760"W	0.00	
9240.00†	90.000	97.126	8700.01	694.51	-86.16	689.14	653617.10	738472.64	33°01'44.825"N	103°49'55.595"W	0.00	
9340.00†	90.000	97.126	8700.01	794.51	-98.57	788.37	653716.32	738460.24	33°01'44.698"N	103°49'54.430"W	0.00	
9440.00†	90.000	97.126	8700.01	894.51	-110.97	887.60	653815.54	738447.83	33°01'44.570"N	103°49'53.265"W	0.00	
9540.00†	90.000	97.126	8700.01	994.51	-123.38	986.82	653914.76	738435.43	33°01'44.443"N	103°49'52.101"W	0.00	
9640.00†	90.000	97.126	8700.01	1094.51	-135.78	1086.05	654013.98	738423.02	33°01'44.315"N	103°49'50.936"W	0.00	
9740.00†	90.000	97.126	8700.01	1194.51	-148.19	1185.28	654113.20	738410.62	33°01'44.188"N	103°49'49.771"W	0.00	
9840.00†	90.000	97.126	8700.01	1294.51	-160.60	1284.51	654212.42	738398.21	33°01'44.060"N	103°49'48.606"W	0.00	
9940.00†	90.000	97.126	8700.01	1394.51	-173.00	1383.73	654311.64	738385.81	33°01'43.933"N	103°49'47.442"W	0.00	
10040.00†	90.000	97.126	8700.01	1494.51	-185.41	1482.96	654410.86	738373.40	33°01'43.806"N	103°49'46.277"W	0.00	
10140.00†	90.000	97.126	8700.01	1594.51	-197.81	1582.19	654510.08	738361.00	33°01'43.678"N	103°49'45.112"W	0.00	
10240.00†	90.000	97.126	8700.01	1694.51	-210.22	1681.42	654609.31	738348.59	33°01'43.551"N	103°49'43.948"W	0.00	
10340.00†	90.000	97.126	8700.01	1794.51	-222.63	1780.64	654708.53	738336.19	33°01'43.423"N	103°49'42.783"W	0.00	
10440.00†	90.000	97.126	8700.01	1894.51	-235.03	1879.87	654807.75	738323.78	33°01'43.296"N	103°49'41.618"W	0.00	
10540.00†	90.000	97.126	8700.01	1994.51	-247.44	1979.10	654906.97	738311.38	33°01'43.168"N	103°49'40.453"W	0.00	
10640.00†	90.000	97.126	8700.01	2094.51	-259.85	2078.33	655006.19	738298.97	33°01'43.041"N	103°49'39.289"W	0.00	
10740.00†	90.000	97.126	8700.01	2194.51	-272.25	2177.55	655105.41	738286.57	33°01'42.913"N	103°49'38.124"W	0.00	
10840.00†	90.000	97.126	8700.01	2294.51	-284.66	2276.78	655204.63	738274.16	33°01'42.786"N	103°49'36.959"W	0.00	
10940.00†	90.000	97.126	8700.01	2394.51	-297.06	2376.01	655303.85	738261.76	33°01'42.658"N	103°49'35.795"W	0.00	
11040.00†	90.000	97.126	8700.01	2494.51	-309.47	2475.24	655403.07	738249.35	33°01'42.531"N	103°49'34.630"W	0.00	

Marshall & Winston, Inc.

Planned Wellpath Report

Plan #1

BAKER HUGHES INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Marshall & Winston, INC**	Slot	**No. 1H SHL**
Area	**Chaves County, NM**	Well	**No. 1H**
Field	**(Medlin 9) Sec 9, T15S, R31E**	Wellbore	**No. 1H PWB**
Facility	**Medlin Fed Com 9 No. 1H**		

WELLPATH DATA (54 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11140.00†	90.000	97.126	8700.01	2594.51	-321.88	2574.46	655502.29	738236.95	33°01'42.403"N	103°49'33.465"W	0.00	
11240.00†	90.000	97.126	8700.01	2694.51	-334.28	2673.69	655601.51	738224.54	33°01'42.276"N	103°49'32.300"W	0.00	
11340.00†	90.000	97.126	8700.01	2794.51	-346.69	2772.92	655700.74	738212.14	33°01'42.148"N	103°49'31.136"W	0.00	
11440.00†	90.000	97.126	8700.00	2894.51	-359.09	2872.15	655799.96	738199.73	33°01'42.021"N	103°49'29.971"W	0.00	
11540.00†	90.000	97.126	8700.00	2994.51	-371.50	2971.37	655899.18	738187.33	33°01'41.893"N	103°49'28.806"W	0.00	
11640.00†	90.000	97.126	8700.00	3094.51	-383.91	3070.60	655998.40	738174.92	33°01'41.766"N	103°49'27.642"W	0.00	
11740.00†	90.000	97.126	8700.00	3194.51	-396.31	3169.83	656097.62	738162.51	33°01'41.638"N	103°49'26.477"W	0.00	
11840.00†	90.000	97.126	8700.00	3294.51	-408.72	3269.06	656196.84	738150.11	33°01'41.511"N	103°49'25.312"W	0.00	
11940.00†	90.000	97.126	8700.00	3394.51	-421.12	3368.28	656296.06	738137.70	33°01'41.383"N	103°49'24.148"W	0.00	
12040.00†	90.000	97.126	8700.00	3494.51	-433.53	3467.51	656395.28	738125.30	33°01'41.256"N	103°49'22.983"W	0.00	
12140.00†	90.000	97.126	8700.00	3594.51	-445.94	3566.74	656494.50	738112.89	33°01'41.128"N	103°49'21.818"W	0.00	
12240.00†	90.000	97.126	8700.00	3694.51	-458.34	3665.97	656593.72	738100.49	33°01'41.001"N	103°49'20.653"W	0.00	
12340.00†	90.000	97.126	8700.00	3794.51	-470.75	3765.19	656692.94	738088.08	33°01'40.873"N	103°49'19.489"W	0.00	
12440.00†	90.000	97.126	8700.00	3894.51	-483.15	3864.42	656792.17	738075.68	33°01'40.746"N	103°49'18.324"W	0.00	
12540.00†	90.000	97.126	8700.00	3994.51	-495.56	3963.65	656891.39	738063.27	33°01'40.618"N	103°49'17.159"W	0.00	
12640.00†	90.000	97.126	8700.00	4094.51	-507.97	4062.88	656990.61	738050.87	33°01'40.491"N	103°49'15.995"W	0.00	
12740.00†	90.000	97.126	8700.00	4194.51	-520.37	4162.10	657089.83	738038.46	33°01'40.363"N	103°49'14.830"W	0.00	
12840.00†	90.000	97.126	8700.00	4294.51	-532.78	4261.33	657189.05	738026.06	33°01'40.236"N	103°49'13.665"W	0.00	
12940.00†	90.000	97.126	8700.00	4394.51	-545.18	4360.56	657288.27	738013.65	33°01'40.108"N	103°49'12.501"W	0.00	
13040.00†	90.000	97.126	8700.00	4494.51	-557.59	4459.79	657387.49	738001.25	33°01'39.981"N	103°49'11.336"W	0.00	
13140.00†	90.000	97.126	8700.00	4594.51	-570.00	4559.01	657486.71	737988.84	33°01'39.853"N	103°49'10.171"W	0.00	
13240.00†	90.000	97.126	8700.00	4694.51	-582.40	4658.24	657585.93	737976.44	33°01'39.726"N	103°49'09.007"W	0.00	
13340.00†	90.000	97.126	8700.00	4794.51	-594.81	4757.47	657685.15	737964.03	33°01'39.598"N	103°49'07.842"W	0.00	
13366.05	90.000	97.126	8700.00[1]	4820.56	-598.04	4783.32	657711.00	737960.80	33°01'39.565"N	103°49'07.538"W	0.00	No. 1H PBHL

Planned Wellpath Report

Plan #1

BAKER HUGHES INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Marshall & Winston, INC**	Slot	**No. 1H SHL**
Area	**Chaves County, NM**	Well	**No. 1H**
Field	**(Medlin 9) Sec 9, T15S, R31E**	Wellbore	**No. 1H PWB**
Facility	**Medlin Fed Com 9 No. 1H**		

HOLE & CASING SECTIONS Ref Wellbore: No. 1H PWB Ref Wellpath: Plan #1

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
8.75in Open Hole	0.00	8905.00	8905.00	0.00	8700.01	0.00	0.00	-44.60	356.73
6.125in Open Hole	8905.00	13366.05	4461.05	8700.01	8700.00	-44.60	356.73	-598.04	4783.32

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) No. 1H PBHL	13366.05	8700.00	-598.04	4783.32	**657711.00**	**737960.80**	33°01'39.565"N	103°49'07.538"W	point

SURVEY PROGRAM Ref Wellbore: No. 1H PWB Ref Wellpath: Plan #1

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	8905.00	NaviTrak (Standard)		No. 1H PWB
8905.00	13366.05	AutoTrak G3 (Standard)		No. 1H PWB

PROPOSED WELLPATH REPORT (CSV version)
Prepared by Baker Hughes INTEQ
Software System: WellArchitect®2.0

REFERENCE WELLPATH IDENTIFICATION

Operator	**Marshall & Winston, INC**
Area	Chaves County, NM
Field	(Medlin 9) Sec 9, T15S, R31E
Facility	**Medlin Fed Com 9 No. 1H**
Slot	No. 1H SHL
Well	No. 1H
Wellbore	No. 1H PWB
Wellpath	**Plan #1**
Sidetrack	(none)

REPORT SETUP INFORMATION

Projection :	NAD27 / TM New Mexico State Planes, Eastern Zone (3001), US feet
North Refe	Grid
Scale	0.999936
Convergen	0.27° East
Software S	WellArchitect®
User	Victor Hernandez
Report Ger	10/6/2009 at 3:58:51 PM
DataBase/	WA_Midland/ev113115.xml

WELLPATI	Local North [ft]	Local East [ft]	Grid East [ft]	Grid North [ft]	Latitude	Longitude
Slot Locati	0	0	652928	738558.8	33°01'45.7	103°50'03.684"W
Facility Ref			652928	738558.8	33°01'45.7	103°50'03.684"W
Field Refer			653095.5	736910	33°01'29.3	103°50'01.809"W

WELLPATH DATUM

Calculation	Minimum curvature
Horizontal	Facility Center
Vertical Re	Rig on No. 1H SHL (RT)
MD Refere	Rig on No. 1H SHL (RT)
Field Vertic	Mean Sea Level
Rig on No.	**0.00ft**
Rig on No.	**4433.00ft**
Facility Ver	0.00ft
Section Ori	0.00ft
Section Ori	0.00ft
Section Az	97.13°

WELLPATH DATA Wellbore: No. 1H PWB Wellpath: Plan #1 † = interpolated/extrapolated

	MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]
	0	0	97.126	0	0	0	0	652928
	8340	**0**	**97.126**	**8340**	**0**	**0**	**0**	**652928**
†	8440	15.915	97.126	8438.72	13.8	-1.71	13.69	652941.7
†	8540	31.83	97.126	8529.87	54.14	-6.72	53.72	652981.7

†	8640	47.745	97.126	8606.47	117.93	-14.63	117.02	653045
†	8740	63.66	97.126	8662.63	200.28	-24.85	198.73	653126.7
†	8840	79.575	97.126	8694.07	294.87	-36.58	292.59	653220.6
	8905.51	**90**	**97.126**	**8700.01**	**360.01**	**-44.66**	**357.23**	**653285.2**
†	8940	90	97.126	8700.01	394.51	-48.94	391.46	653319.4
†	9040	90	97.126	8700.01	494.51	-61.35	490.69	653418.7
†	9140	90	97.126	8700.01	594.51	-73.75	589.91	653517.9
†	9240	90	97.126	8700.01	694.51	-86.16	689.14	653617.1
†	9340	90	97.126	8700.01	794.51	-98.57	788.37	653716.3
†	9440	90	97.126	8700.01	894.51	-110.97	887.6	653815.5
†	9540	90	97.126	8700.01	994.51	-123.38	986.82	653914.8
†	9640	90	97.126	8700.01	1094.51	-135.78	1086.05	654014
†	9740	90	97.126	8700.01	1194.51	-148.19	1185.28	654113.2
†	9840	90	97.126	8700.01	1294.51	-160.6	1284.51	654212.4
†	9940	90	97.126	8700.01	1394.51	-173	1383.73	654311.6
†	10040	90	97.126	8700.01	1494.51	-185.41	1482.96	654410.9
†	10140	90	97.126	8700.01	1594.51	-197.81	1582.19	654510.1
†	10240	90	97.126	8700.01	1694.51	-210.22	1681.42	654609.3
†	10340	90	97.126	8700.01	1794.51	-222.63	1780.64	654708.5
†	10440	90	97.126	8700.01	1894.51	-235.03	1879.87	654807.8
†	10540	90	97.126	8700.01	1994.51	-247.44	1979.1	654907
†	10640	90	97.126	8700.01	2094.51	-259.85	2078.33	655006.2
†	10740	90	97.126	8700.01	2194.51	-272.25	2177.55	655105.4
†	10840	90	97.126	8700.01	2294.51	-284.66	2276.78	655204.6
†	10940	90	97.126	8700.01	2394.51	-297.06	2376.01	655303.9
†	11040	90	97.126	8700.01	2494.51	-309.47	2475.24	655403.1
†	11140	90	97.126	8700.01	2594.51	-321.88	2574.46	655502.3
†	11240	90	97.126	8700.01	2694.51	-334.28	2673.69	655601.5
†	11340	90	97.126	8700.01	2794.51	-346.69	2772.92	655700.7
†	11440	90	97.126	8700	2894.51	-359.09	2872.15	655800
†	11540	90	97.126	8700	2994.51	-371.5	2971.37	655899.2
†	11640	90	97.126	8700	3094.51	-383.91	3070.6	655998.4
†	11740	90	97.126	8700	3194.51	-396.31	3169.83	656097.6
†	11840	90	97.126	8700	3294.51	-408.72	3269.06	656196.8
†	11940	90	97.126	8700	3394.51	-421.12	3368.28	656296.1
†	12040	90	97.126	8700	3494.51	-433.53	3467.51	656395.3
†	12140	90	97.126	8700	3594.51	-445.94	3566.74	656494.5
†	12240	90	97.126	8700	3694.51	-458.34	3665.97	656593.7
†	12340	90	97.126	8700	3794.51	-470.75	3765.19	656692.9
†	12440	90	97.126	8700	3894.51	-483.15	3864.42	656792.2
†	12540	90	97.126	8700	3994.51	-495.56	3963.65	656891.4
†	12640	90	97.126	8700	4094.51	-507.97	4062.88	656990.6
†	12740	90	97.126	8700	4194.51	-520.37	4162.1	657089.8
†	12840	90	97.126	8700	4294.51	-532.78	4261.33	657189.1
†	12940	90	97.126	8700	4394.51	-545.18	4360.56	657288.3
†	13040	90	97.126	8700	4494.51	-557.59	4459.79	657387.5
†	13140	90	97.126	8700	4594.51	-570	4559.01	657486.7
†	13240	90	97.126	8700	4694.51	-582.4	4658.24	657585.9
†	13340	90	97.126	8700	4794.51	-594.81	4757.47	657685.2
	13366.05	**90**	**97.126**	**8700**	**4820.56**	**-598.04**	**4783.32**	**657711**

HOLE AND CASING SECTIONS Ref Wellbore: No. 1H PWB Ref Wellpath: Plan #1

String/Dian	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]
8.75in Ope	0	8905	8905	0	8700.01	0	0	-44.6
6.125in Op	8905	13366.05	4461.05	8700.01	8700	-44.6	356.73	-598.04

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude
(1) No. 1H	13366.05	8700	-598.04	4783.32	657711	737960.8	33°01'39.5(	103°49'07..

SURVEY PROGRAM Ref Wellbore: No. 1H PWB Ref Wellpath: Plan #1

Start MD [ft]	End MD [ft]	Pos Unc M	Log Name/	Wellbore
0	8905	NaviTrak (Standard)		No. 1H PWB
8905	13366.05	AutoTrak G3 (Standar		No. 1H PWB

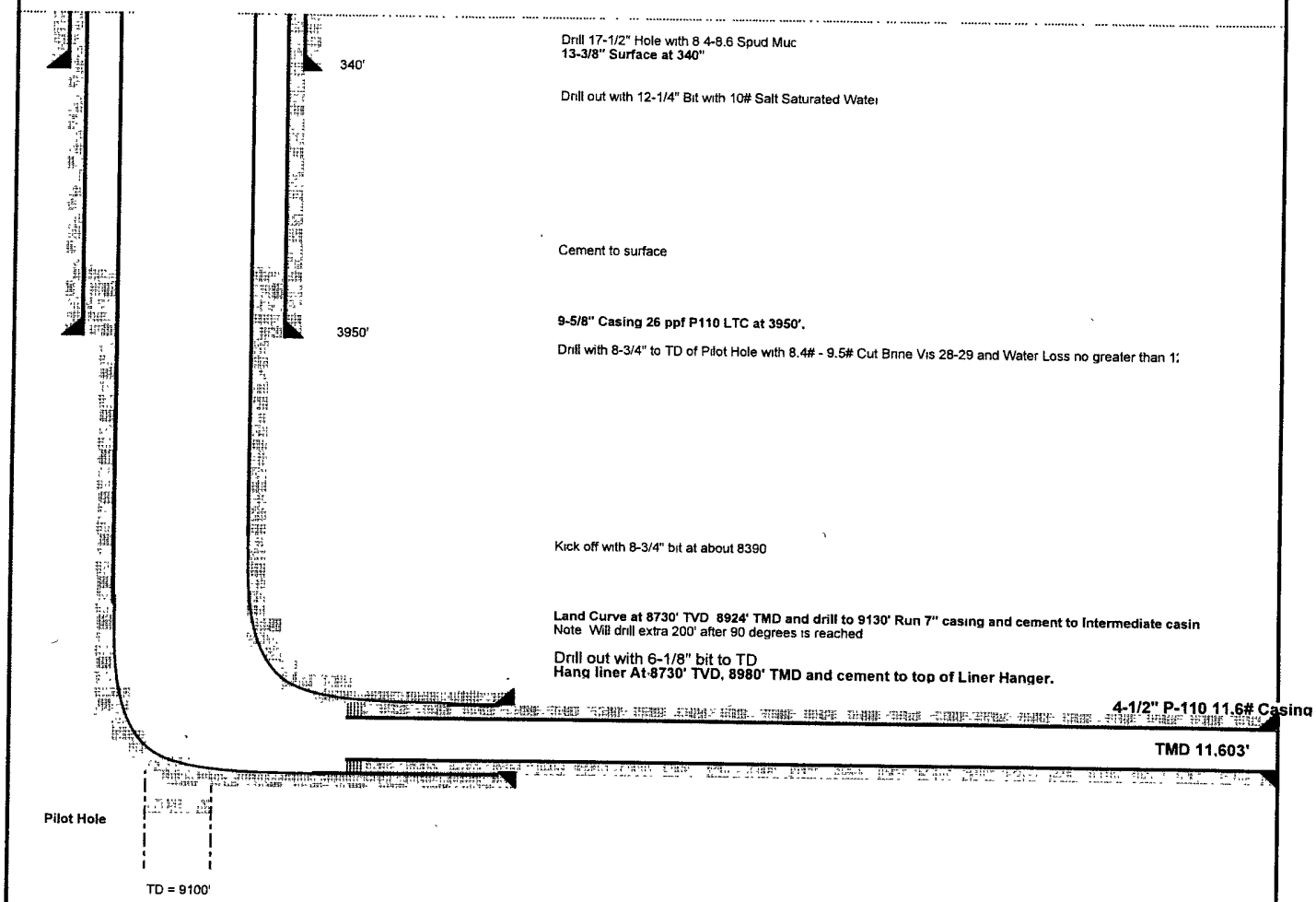
station Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
738558.8	33°01'45.7	103°50'03.(	0	Tie On
738558.8	**33°01'45.7**	**103°50'03.**	**0**	**EST. KOP**
738557.1	33°01'45.6	103°50'03.:	15.91	
738552.1	33°01'45.6	103°50'03.(	15.91	

738544.2	33°01'45.5	103°50'02.	15.91	
738534	33°01'45.4	103°50'01.	15.91	
738522.2	33°01'45.3	103°50'00.	15.91	
738514.1	**33°01'45.2**	**103°49'59.**	**15.91**	**END OF CURVE**
738509.9	33°01'45.2	103°49'59.	0	
738497.5	33°01'45.0	103°49'57.	0	
738485.1	33°01'44.9	103°49'56.	0	
738472.6	33°01'44.8	103°49'55.	0	
738460.2	33°01'44.6	103°49'54.	0	
738447.8	33°01'44.5	103°49'53.	0	
738435.4	33°01'44.4	103°49'52.	0	
738423	33°01'44.3	103°49'50.	0	
738410.6	33°01'44.1	103°49'49.	0	
738398.2	33°01'44.0	103°49'48.	0	
738385.8	33°01'43.9	103°49'47.	0	
738373.4	33°01'43.8	103°49'46.	0	
738361	33°01'43.6	103°49'45.	0	
738348.6	33°01'43.5	103°49'43.	0	
738336.2	33°01'43.4	103°49'42.	0	
738323.8	33°01'43.2	103°49'41.	0	
738311.4	33°01'43.1	103°49'40.	0	
738299	33°01'43.0	103°49'39.	0	
738286.6	33°01'42.9	103°49'38.	0	
738274.2	33°01'42.7	103°49'36.	0	
738261.8	33°01'42.6	103°49'35.	0	
738249.4	33°01'42.5	103°49'34.	0	
738237	33°01'42.4	103°49'33.	0	
738224.5	33°01'42.2	103°49'32.	0	
738212.1	33°01'42.1	103°49'31.	0	
738199.7	33°01'42.0	103°49'29.	0	
738187.3	33°01'41.8	103°49'28.	0	
738174.9	33°01'41.7	103°49'27.	0	
738162.5	33°01'41.6	103°49'26.	0	
738150.1	33°01'41.5	103°49'25.	0	
738137.7	33°01'41.3	103°49'24.	0	
738125.3	33°01'41.2	103°49'22.	0	
738112.9	33°01'41.1	103°49'21.	0	
738100.5	33°01'41.0	103°49'20.	0	
738088.1	33°01'40.8	103°49'19.	0	
738075.7	33°01'40.7	103°49'18.	0	
738063.3	33°01'40.6	103°49'17.	0	
738050.9	33°01'40.4	103°49'15.	0	
738038.5	33°01'40.3	103°49'14.	0	
738026.1	33°01'40.2	103°49'13.	0	
738013.7	33°01'40.1	103°49'12.	0	
738001.3	33°01'39.9	103°49'11.	0	
737988.8	33°01'39.8	103°49'10.	0	
737976.4	33°01'39.7	103°49'09.	0	
737964	33°01'39.5	103°49'07.	0	
737960.8	**33°01'39.5**	**103°49'07.**	**0**	**No. 1H PE** **1**

End E/W [ft]
356.73
4783.32

Shape	Comment	Design Comments
point		

AFE No.	Medlin Fee 9-1H	AFE Information
API #	Chavez County, NM	Dry Hole: Days:
Permit No.	Proposed Wellbore Sketch	Proposed TD: 11603' TMD 8730' TVD
Project No.		v



Well Information

Surface Location Chavez County, T15S R31E Section 9

Exhibit H
Proposed Well Cross-Section

RIG PLAT

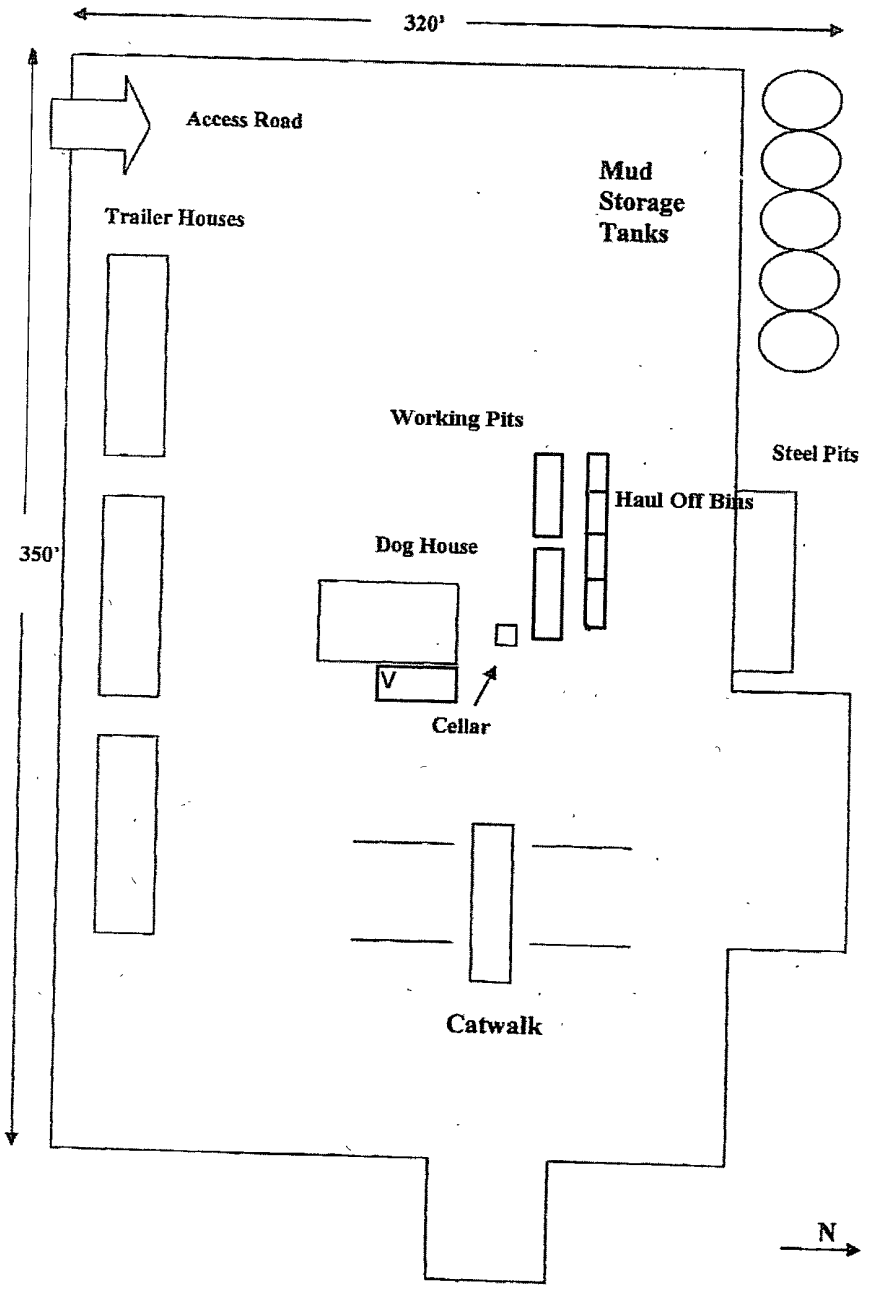


Exhibit E
Rig Layout
Patriot Drilling

PRIVATE SURFACE OWNER AGREEMENT

OPERATOR: Marshall & Winston Incorporated

Well Name: Medlin Fed Com # 9-1 H

Footage Location: Surface: 2110' FSL, 370' FWL

Bottom: 1980' FSL, 330' FEL

Section: 09, **T.**15 **S., R.** 31 **E.,**

County: Chaves, **State:** NM

Lease Number: NMNM 105886

STATEMENT OF SURFACE USE

The surface to the subject land is owned by:

Medlin Ranch, (Billy Ray Medlin and Donna Medlin),
P.O. Box 50
Maljamar, NM 88264

The surface owner has been contacted regarding the drilling of the subject well, and an agreement for surface use has been negotitated.

CERTIFICATION: I hereby certify that the statements made in this statement are to the best of my knowledge, true and correct.

Vernon D Dyer .
SIGNATURE

NAME: Gary Gourley/ Vernon D. Dyer

DATE: 11/09/2009

TITLE: Agent

Date: November 24, 2009

I, Jace Reid as the appointed Authorized Representative for Billy R. Medlin and Donna K. Medlin owners of the surface on which Marshall & Winston Incorporated's Medlin Fed Com #9-1H well shall be drilled upon being the 2110' FSL and 370' FWL, Section 9, T.15S.-R.31E., Chaves County, New Mexico I hereby authorize Marshall & Winston Incorporated to drill this well from non-federal lands and as authorized representative I guarantee the Department of the Interior, including the Bureau of Land Management access to the non-federal lands to perform all necessary surveys and inspections of this well location.

X _____

Jace Reid, Authorized Representative for
Billy R. Medlin and Donna K. Medlin
Surface Owners.

PECOS DISTRICT - RFO
CONDITIONS OF APPROVAL

December 2, 2009

OPERATORS NAME: **Winston and Marshall Incorporated**
LEASE NO.: **NM-105886**
WELL NAME & NO: **Medlin Federal Com 9 No. 1H**
SURFACE HOLE FOOTAGE: **2110' FSL & 370' FWL**
BOTTOM HOLE FOOTAGE: **1980' FSL & 330'FEL**
LOCATION: **Section 9, T. 15 S., R. 31 E., NMPM**
COUNTY: **Chaves County, New Mexico**

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.

I. 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).

II. 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.

III. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations (access road and/or well pad). 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.

IV. CONSTRUCTION

A. NOTIFICATION:

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Roswell Field Office at (505) 627-0247 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 Application for Permit to Drill and Conditions of Approval on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL:

The topsoil will be stripped to approximately 6 inches in depth within the area designated for construction of the well pad. The operator shall stockpile the stripped topsoil adjacent to the constructed well pad. The topsoil will be used for interim and final reclamation of the surface disturbance created by the construction of the well pad.

C. CLOSED SYSTEMS OR STEEL TANKS:

A closed system or steel tanks will be used in lieu of reserve pits.

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

D. 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 need.

E. ON LEASE ACCESS ROADS:

Road Egress and Ingress

The on lease access road shall be constructed to access the southwest corner of the well pad.

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.

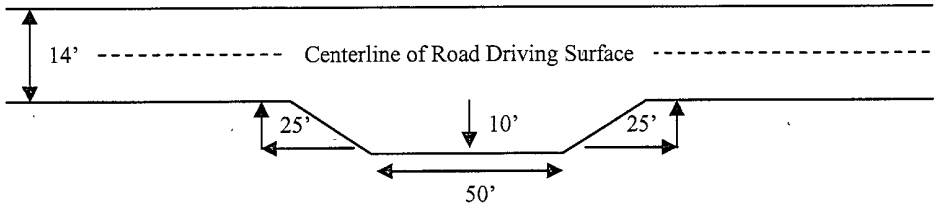
Ditching

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:

Standard Turnout – Plan View

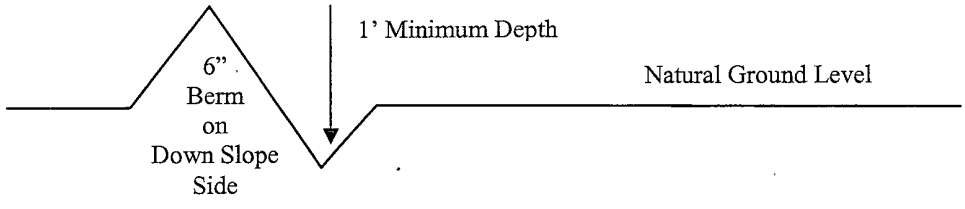


Drainage

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

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

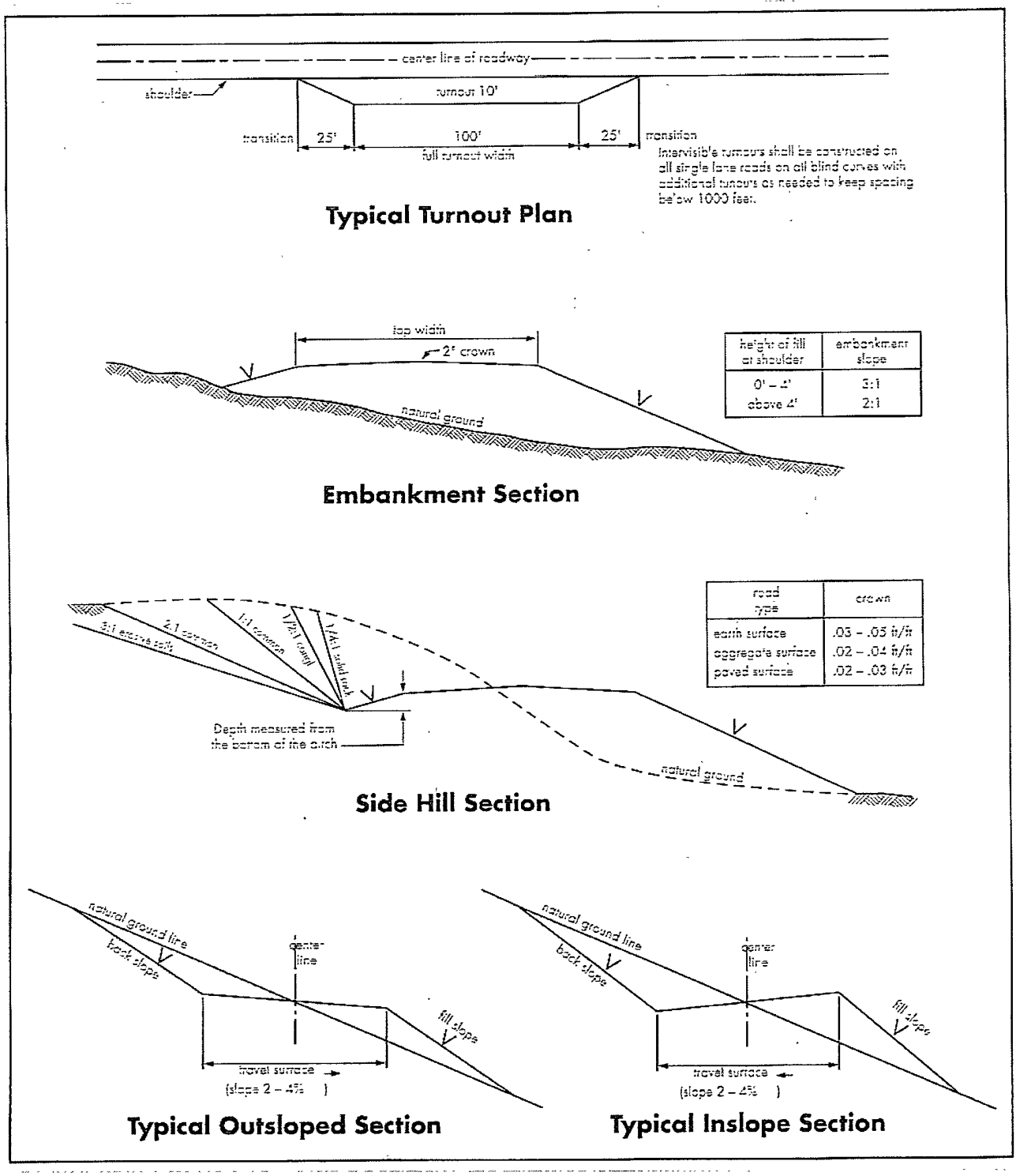
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

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



V. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS:

1. Call the Roswell Field Office, 2909 West Second St., Roswell, NM 88201. During office hours call (575) 627-0205 or after office hours call (575) 910-6024. Engineer on call during office hours call (575) 627-0275 or after office hours call (575) 626-5749.

2. The BLM is to be notified a minimum of 24 hours in advance for a representative to witness:

a. Spudding well
b. Setting and/or Cementing of all casing strings

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

BOPE Tests

3. 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.

4. Include the API Number assigned to well by NMOCD on the subsequent report of setting the first casing string.

5. The operator will accurately measure the drilling rate in ft/min to set the base of the usable water protection casing string(s) opposite competent rock. The record of the drilling rate along with the caliper-gamma ray-neutron well log run to surface will be submitted to this office as well as all other logs run on the borehole 30 days from completion

6. Fresh water and non toxic drilling mud shall be used to drill to the base of the usable water protection casing string(s). Any polymers used will be water based and non-toxic.

B. CASING:

1. The **13-3/8** inch usable water protection casing string shall be set at approximately 350 ft. in competent bedrock.

If not the operator is required to set usable water protecting casing in the next thick competent bedding (i.e. 15 to 25 ft or greater) encountered and cemented to the surface.

a. If cement does not circulate to the surface, the Roswell Field 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 will be a minimum 18 hours for a water basin or 500 pounds compression strength, whichever is greater. (This is to include the lead cement).

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 compression strength, whichever is greater.

d. If cement falls back, remedial action will be done prior to drilling out that string.

2. The minimum required fill of cement behind the **8-5/8** inch intermediate casing is **sufficient to circulate to the surface.** If cement does not circulate see B.1.a-d above.

3. The minimum required fill of cement behind the **5-1/2** inch production casing is **sufficient to tie back 500 feet above the uppermost perforation in the pay zone**. If cement does not circulate, 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.

4. 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.

5. All casing shall be new or reconditioned and tested casing and meet API standards for new casing. The use of reconditioned and tested casing shall be subject to approval by the authorized officer. Approval will be contingent upon the wall thickness of any casing being verified to be at least 87-1/2 per cent of the nominal wall thickness of new casing.

C. PRESSURE CONTROL:

1. Before drilling below the **13-3/8** inch surface casing shoe, the blowout preventer assembly shall consist of a minimum of One Annular Preventer or Two Ram-Type Preventers and a Kelly Cock/Stabbing Valve. Before drilling below the **8-5/8** inch intermediate casing shoe, the blowout preventer assembly shall consist of a minimum of One Annular Preventer, Two Ram-Type Preventers, and a Kelly Cock/Stabbing Valve.

2. Before drilling below the **13-3/8** inch surface casing shoe, minimum working pressure of the blowout preventer and related equipment (BOPE) shall be **2000** psi. Before drilling below the **8-5/8** inch intermediate casing shoe, minimum working pressure of the blowout preventer and related equipment (BOPE) shall be **3000** psi.

3. The BOPE shall be installed before drilling below the **13-3/8** inch surface casing and the **8-5/8** inch intermediate casing and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

a. The BLM Roswell Field office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

b. The tests shall be done by an independent service company.

c. 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.

d. 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 BLM Roswell Field Office at 2909 West Second Street, Roswell, New Mexico 88201.

e. Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.

f. Testing must be done in a safe workman like manner. Hard line connections shall be required.

VI. PRODUCTION

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, Juniper Green (Standard Environmental Color Chart June 2008).

VII. 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. Earthwork for interim and final reclamation must be completed within 6 months of well completion or well plugging (weather permitting). The operator shall submit a Sundry Notices and Reports on Wells (Notice of Intent), Form 3160-5, prior to conducting interim reclamation.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche may be used in road repairs, fire walls or for building other roads and locations. In addition, 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.

PECOS DISTRICT
SEED MIX FOR
The following Soils or Soil associations may represent this ecological site:
Bascal Gravelly Loam. Bascom.
Philder Very Gravelly Fine Sandy Loam
Yturbide Loamy Sand

Gravelly SD-3 Ecological Site

April 4. 2006

Common Name and Preferred Variety	Scientific Name	Pounds of Pure Live Seed Per Acre
Blue grama	(*Bouteloua gracilis)*	1.50
Sideoats grama.	(*Bouteloua curtipendula)*	1.50
Sand dropseed	(*Sporobolus cryptandrus)*	0.50
Plains bristlegrass	(*Setaria macrostachya)*	2.50
Vine mesquite	(*Panicum obtusum)*	1.50
Desert or Scarlet Globemallow	(*Sphaeralcea ambigua*) or *(S. coccinea)*	1.00
Croton or Desert zinnia	(*Croton spp.*) or *(Zinnia grandiflora)*	0.50
TOTAL POUNDS PURE LIVE SEED (pls) PER ACRE Certified Weed Free Seed		9.00

If on species is not available,
increase **ALL** others proportionately.
NOT JUST ONE SPECIES!
Use at least 4 species, including 1 forb

No less than 9.0 pounds pls per acre shall be applied

APPROVED: /s/ Douglas J. Burger
District Manager. Pecos District

A. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS
VIII. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

a) Upon abandonment of the well and/or when the access road is no longer in service, a Notice of Intent for Final Abandonment with the proposed surface restoration procedure must be submitted for approval.

b) 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 agreements and a copy of the release is to be submitted upon abandonment.

c) Upon abandonment of the well, all casing shall be cut-off at the base of the cellar or 3-feet below final restored ground level (whichever is deeper). A 4-inch pipe, 10 feet in length, shall be installed 4 feet above ground and embedded in cement. The following information shall be permanently inscribed on the dry hole marker: Well name and number, the name of the operator, the lease serial number, the surveyed location (the quarter-quarter section, section, township and range or other authorized survey designation acceptable to the authorized officer; such as metes and bounds).

d) d. Surface Reclamation must be completed within 6 months of well plugging. If the operator proposes to modify the plans for surface reclamation approved on the APD, the operator must attach these modifications to the Subsequent Report of Plug and Abandon using Sundry Notices and Reports on Wells, Form 3160-5.

VIIII. PIPELINE PROTECTION REQUIREMENT

Precautionary measures shall be taken by the operator during construction of the access road to protect existing pipelines that the access road will cross over. An earthen berm; 2 feet high by 3 feet wide and 14 feet across the access road travelway (2' X 3' X 14'), shall be constructed over existing pipelines. The operator shall be held responsible for any damage to existing pipelines. If the pipeline is ruptured and/or damaged the operator shall immediately cease construction operations and repair the pipeline. The operator shall be held liable for any unsafe construction operations that threaten human life and/or cause the destruction of equipment.