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

RECEIVED
FEB 13 2009
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Form 3160-3
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No. NMLC ~~062324A~~ 062524A

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 Federal Com ~~8~~ 2 (37602)

2. Name of Operator: Marshall and Winston Inc. (14187)

9 API Well No. 30-~~015~~ 005-29077

3a. Address: PO Box 50880, Midland, TX 79710-0880

3b. Phone No. (include area code): (432) 684-6373

10 Field and Pool, or Exploratory: Wildcat Abo-Wolfcamp

4. Location of Well (Report location clearly and in accordance with any State requirements.*)
At surface: 660 Ft. FSL & 330 Ft. FWL Unit M
At proposed prod. zone: 660 Ft. FSL & 330 Ft. FEL Unit P

11. Sec., T. R. M. or Blk. and Survey or Area: Sec. 08, T. 15 S., R. 31 E.

14 Distance in miles and direction from nearest town or post office*: Approximately 15 miles North of Maljamar, NM., 28 miles West of Lovington, 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 Ft. east of Section Line, BHL 330 Ft. west of Section Line

16. No. of acres in lease: 160

17. Spacing Unit dedicated to this well: 320 acres

18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft: N/A

19. Proposed Depth: TVD 9100', MD 13,125 ' Lower Abo 8700 '

20. BLM/BIA Bond No. on file: NM 0877

21 Elevations (Show whether DF, KDB, RT, GL, etc.): 4444' GL

22. Approximate date work will start*: 03/01/2009

23. Estimated duration: 30 to 45 days

24. Attachments

ROSWELL CONTROLLED WATER BASIN

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: 12-26-2008

Title: Agent

Approved by (Signature): /s/ Jerry Dutchover — Name (Printed/Typed): /s/ Jerry Dutchover — Date: FEB 10 2009

Title: Acting Assistant Field Manager, Lands And Minerals — Office: ROSWELL FIELD OFFICE

APPROVED FOR 2 YEARS

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)

KZ *(Instructions on page 2)

DECLARED WATER BASIN

CEMENT BEHIND THE 13 3/8" CASING MUST BE CIRCULATED

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
30-005-29079		Wildcat Abo-Wolfcamp

Property Code	Property Name	Well Number
37602	MEDLIN FEDERAL COM	2H

OGRID No.	Operator Name	Elevation
14187	MARSHALL & WINSTON, INC.	4444'

Surface Location

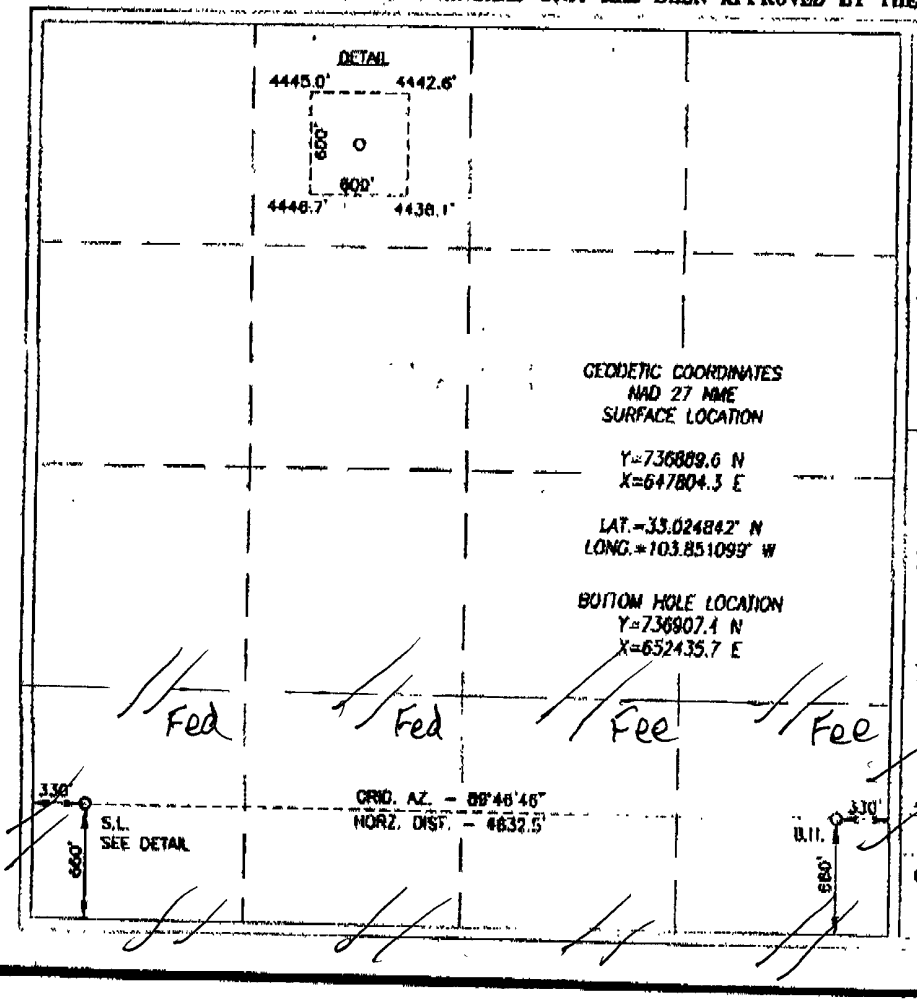
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	8	15-S	31-E		660	SOUTH	330	WEST	CHAVES

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
P	8	15-S	31-E		660	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.

Vicki D Dyer 12-26-08
Signature Date

Vicki D. Dyer
Printed Name

SURVEYOR CERTIFICATION

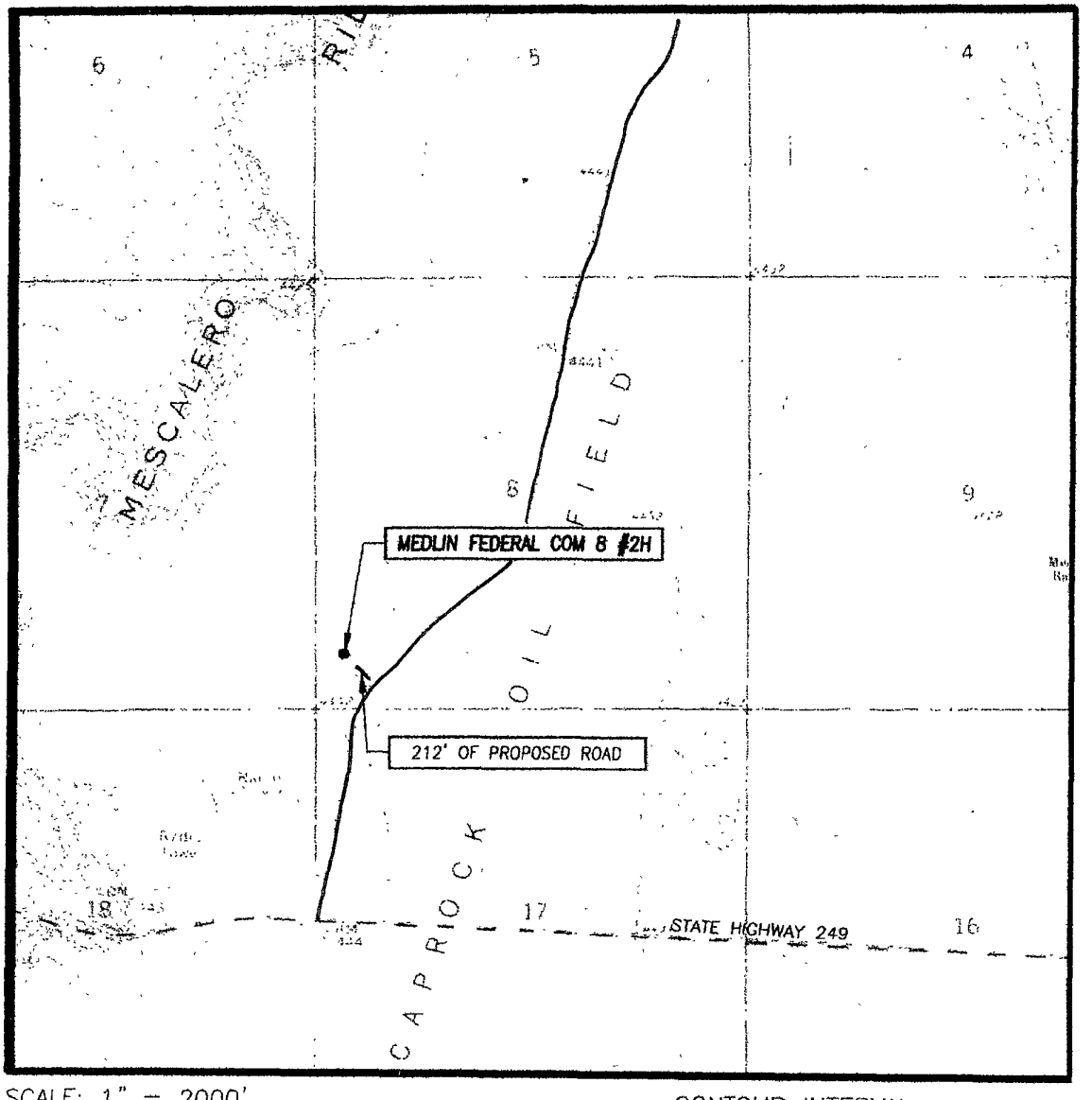
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

SEPTEMBER 26, 2008
Date Surveyed
Signature & Seal of Professional Surveyor
3239
10/13/08

Certificate No. RONALD J. EIDSON 12641
RONALD J. EIDSON 3239

EXHIBIT A

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

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

SEC. 8 TWP. 15-S RGE. 31-E

SURVEY N.M.P.M.

COUNTY CHAVES STATE NEW MEXICO

DESCRIPTION 660' FSL & 330' FWL

ELEVATION 4444'

OPERATOR MARSHALL & WINSTON, INC.

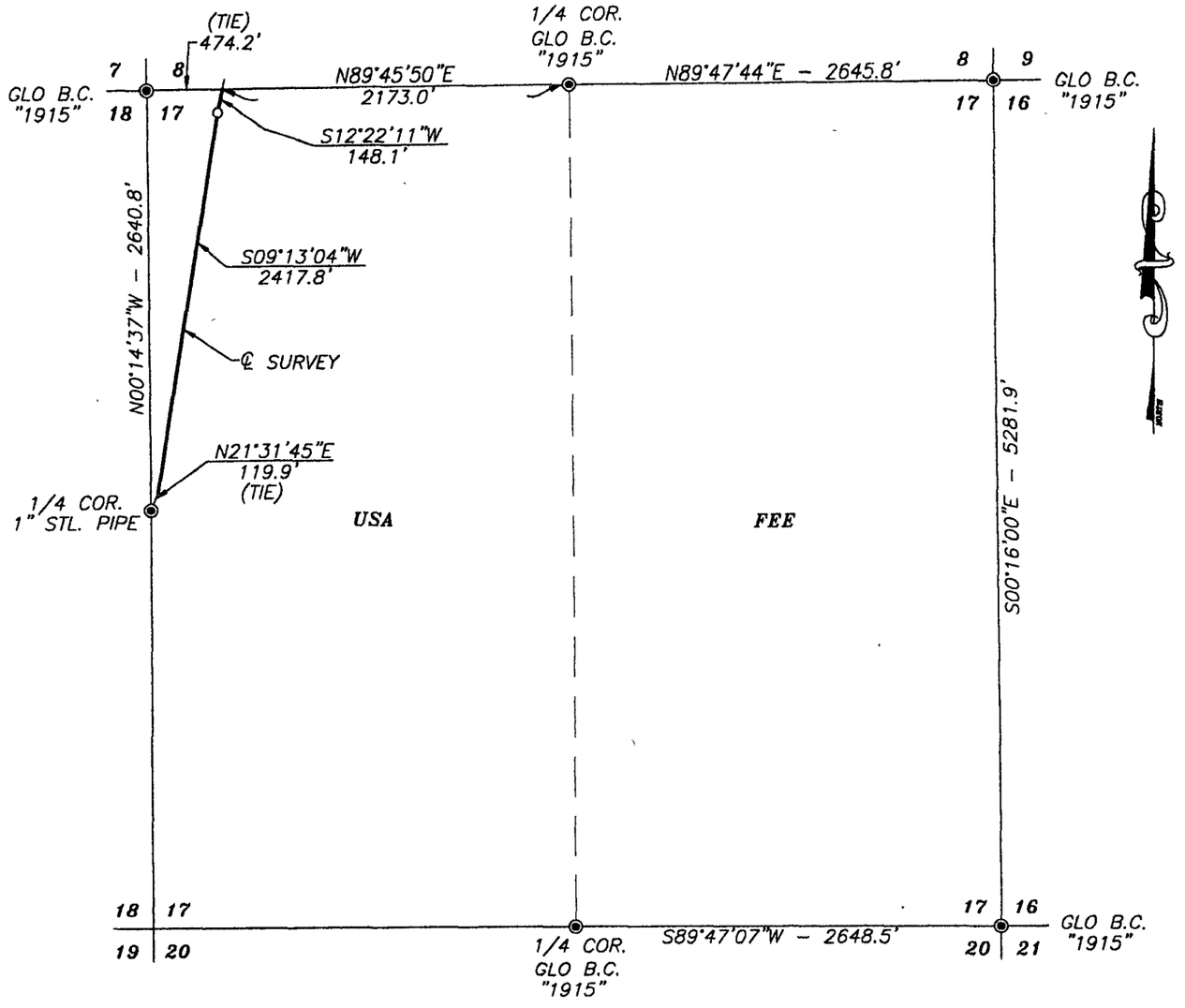
LEASE MEDLIN FEDERAL COM 8

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

SECTION 17, TOWNSHIP 15 SOUTH, RANGE 31 EAST, N.M.P.M.,
CHAVES COUNTY, NEW MEXICO.



DESCRIPTION

A STRIP OF LAND 50.0 FEET WIDE AND 2565.9 FEET OR 0.486 MILES IN LENGTH CROSSING USA LAND IN SECTION 17, TOWNSHIP 15 SOUTH, RANGE 31 EAST, NMPM, CHAVES COUNTY, NEW MEXICO AND BEING 25.0 FEET LEFT AND 25.0 FEET RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY.

NOTE: *BEARINGS SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATE SYSTEM "NEW MEXICO EAST ZONE" NORTH AMERICAN DATUM 1983. DISTANCES ARE SURFACE VALUES.*

1000 0 1000 2000 FEET
Scale:1"=1000'

I HEREBY CERTIFY THAT I DIRECTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

REGISTERED PROFESSIONAL SURVEYOR NEW MEXICO 3239

Ronald J. Eidson 12/8/08

RONALD J. EIDSON, N.M. P.S. No. 3239

PROVIDING SURVEYING SERVICES SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

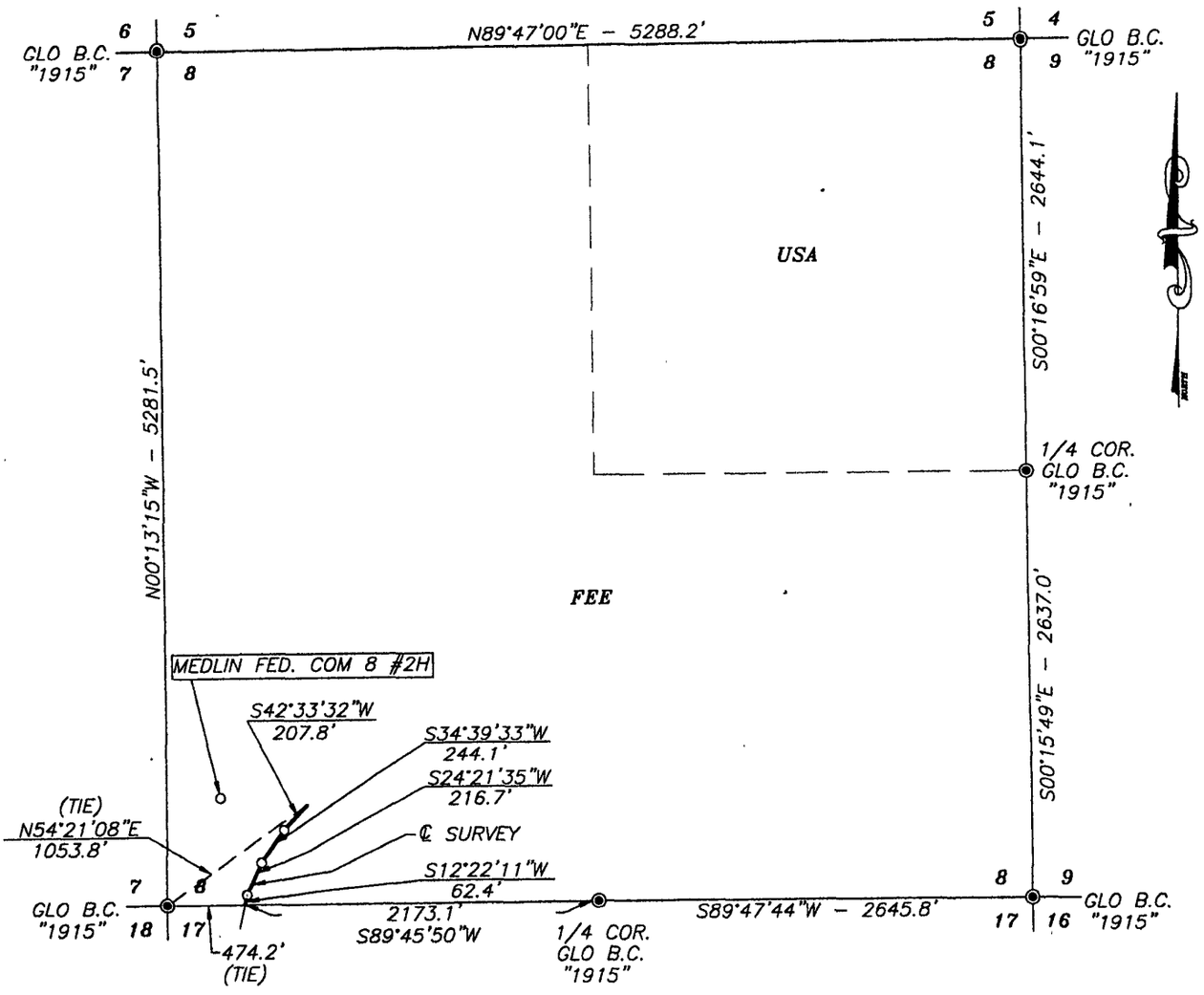
MARSHALL & WINSTON, INC.

CENTERLINE SURVEY OF AN ACCESS ROAD IN SECTION 17, TOWNSHIP 15 SOUTH, RANGE 31 EAST, N.M.P.M., CHAVES COUNTY, NEW MEXICO

Survey Date: 11/21/08	Sheet 1 of 1 Sheets
W.O. Number: 08.11.1927	Drawn By: LA
Date: 12/18/08	08111927_ROADS

EXHIBIT B-2

SECTION 8, TOWNSHIP 15 SOUTH, RANGE 31 EAST, N.M.P.M.,
CHAVES COUNTY, NEW MEXICO.



DESCRIPTION

CENTERLINE SURVEY OF A PIPELINE EASEMENT CROSSING SECTION 8, TOWNSHIP 15 SOUTH, RANGE 31 EAST, NMPM, CHAVES COUNTY, NEW MEXICO AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION WHICH LIES N54°21'08"E 1053.8 FEET FROM THE SOUTHWEST CORNER OF SAID SECTION; THEN S42°33'32"W 207.8 FEET; THEN S34°39'33"W 244.1 FEET; THEN S24°21'35"W 216.7 FEET; THEN S12°22'11"W 62.4 FEET TO A POINT ON THE SOUTH LINE OF SAID SECTION WHICH LIES N89°45'50"E 474.2 FEET FROM SAID SOUTHWEST CORNER OF SAID SECTION.

TOTAL LENGTH EQUALS 731.0 FEET OR 44.30 RODS

NOTE: *BEARINGS SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATE SYSTEM "NEW MEXICO EAST ZONE" NORTH AMERICAN DATUM 1983. DISTANCES ARE SURFACE VALUES.*

1000 0 1000 2000 FEET

Scale: 1"=1000'

I HEREBY CERTIFY THAT I DIRECTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

NEW MEXICO 3239 REGISTERED PROFESSIONAL SURVEYOR

Ronald J. Eidson 12/18/08

RONALD J. EIDSON N.M. P.S. No. 3239

PROVIDING SURVEYING SERVICES SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

MARSHALL & WINSTON, INC.

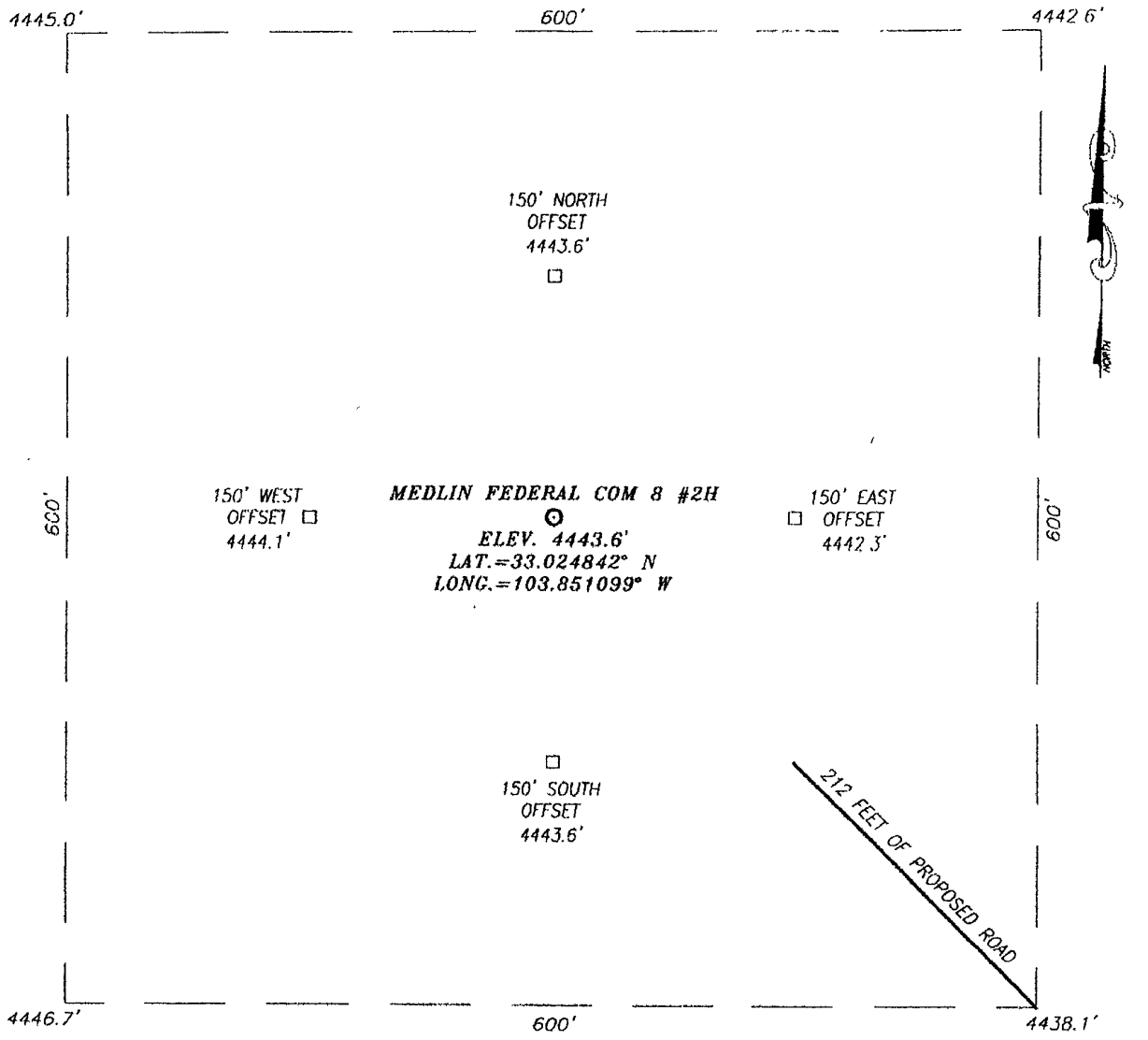
CENTERLINE SURVEY OF AN ACCESS ROAD IN SECTION 8, TOWNSHIP 15 SOUTH, RANGE 31 EAST, N.M.P.M., CHAVES COUNTY, NEW MEXICO

Survey Date: 11/21/08	Sheet 1 of 1 Sheets
W.O. Number: 08.11.1927	Drawn By: LA
Date: 12/18/08	08111927_ROADS

EXHIBIT B-3

SECTION 8, TOWNSHIP 15 SOUTH, RANGE 31 EAST, N.M.P.M.,

CHAVES COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF STATE HIGHWAY 249 AND STATE HIGHWAY 172, GO WEST ON STATE ROAD 249 APPROX. 3.0 MILES. TURN RIGHT AND GO NORTH APPROX 0.6 MILES. TURN LEFT AT PROPOSED ROAD SURVEY AND GO NORTHWEST APPROX. 212 FEET. THIS LOCATION IS APPROX. 212 FEET NORTHWEST.

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

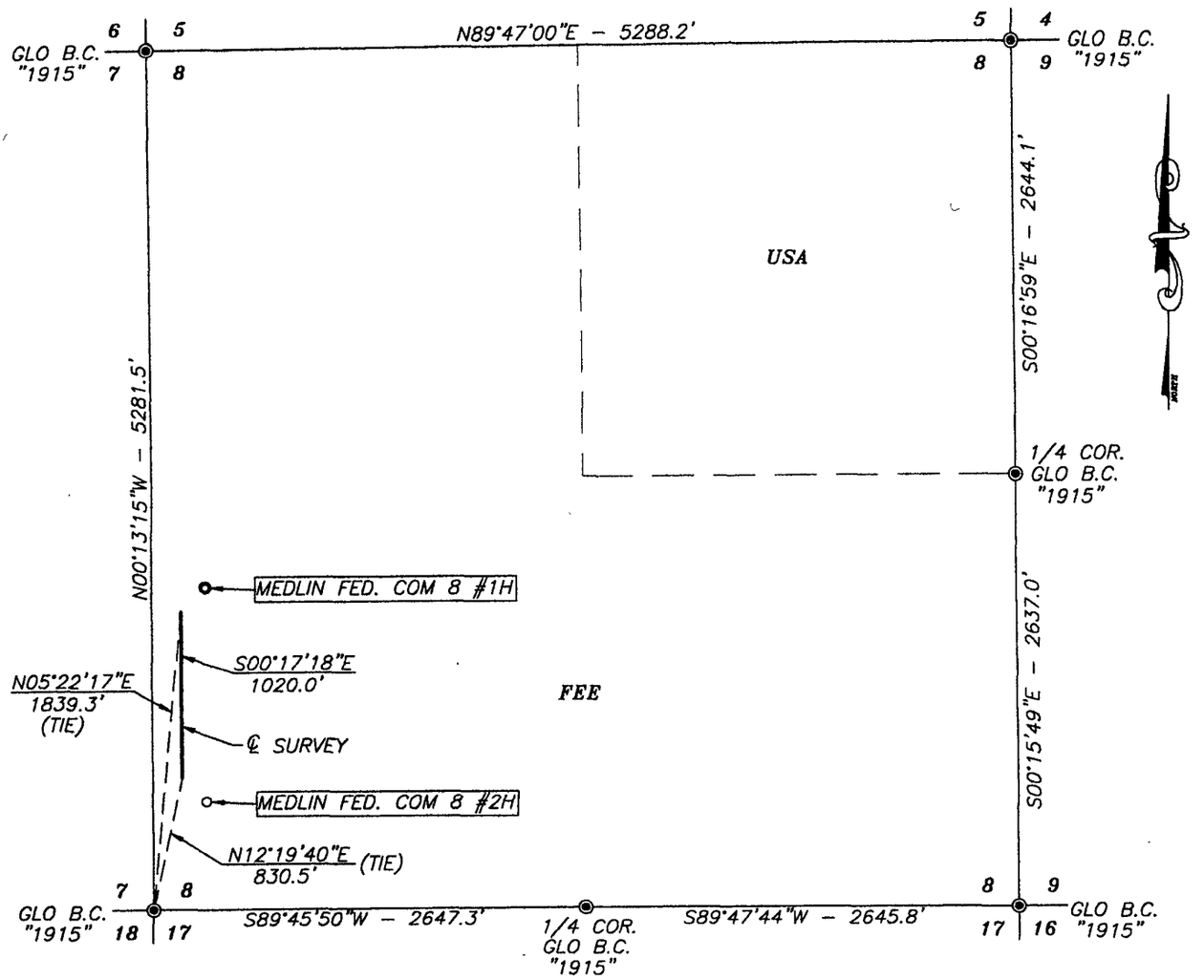
MARSHALL & WINSTON, INC.

MEDLIN FEDERAL COM 8 #2H WELL
LOCATED 660 FEET FROM THE SOUTH LINE
AND 330 FEET FROM THE WEST LINE OF SECTION 8,
TOWNSHIP 15 SOUTH, RANGE 31 EAST, N.M.P.M.,
CHAVES COUNTY, NEW MEXICO.

Survey Date: 9/26/08	Sheet 1 of 1 Sheets		
W.O. Number: 08.11.1577	Dr By: DSS	Rev 1:	
Date: 10/2/08		08111577	Scale: 1"=100'

EXHIBIT B-4

SECTION 8, TOWNSHIP 15 SOUTH, RANGE 31 EAST, N.M.P.M.,
CHAVES COUNTY, NEW MEXICO.



DESCRIPTION

CENTERLINE SURVEY OF A PIPELINE EASEMENT CROSSING SECTION 8, TOWNSHIP 15 SOUTH, RANGE 31 EAST, NMPM, CHAVES COUNTY, NEW MEXICO AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION WHICH LIES N05°22'17"E 1839.3 FEET FROM THE SOUTHWEST CORNER OF SAID SECTION; THEN S00°17'18"E 1020.0 FEET TO A POINT IN THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION WHICH LIES N12°19'40"E 830.5 FEET FROM SAID SOUTHWEST CORNER OF SAID SECTION.

TOTAL LENGTH EQUALS 1020.0 FEET OR 61.82 RODS

NOTE: *BEARINGS SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATE SYSTEM "NEW MEXICO EAST ZONE" NORTH AMERICAN DATUM 1983. DISTANCES ARE SURFACE VALUES.*

1000 0 1000 2000 FEET

Scale: 1"=1000'

I HEREBY CERTIFY THAT I DIRECTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

NEW MEXICO 3239 REGISTERED PROFESSIONAL SURVEYOR

12/18/08

RONALD J. EDSON, N.M. P.S. No. 3239

PROVIDING SURVEYING SERVICES SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

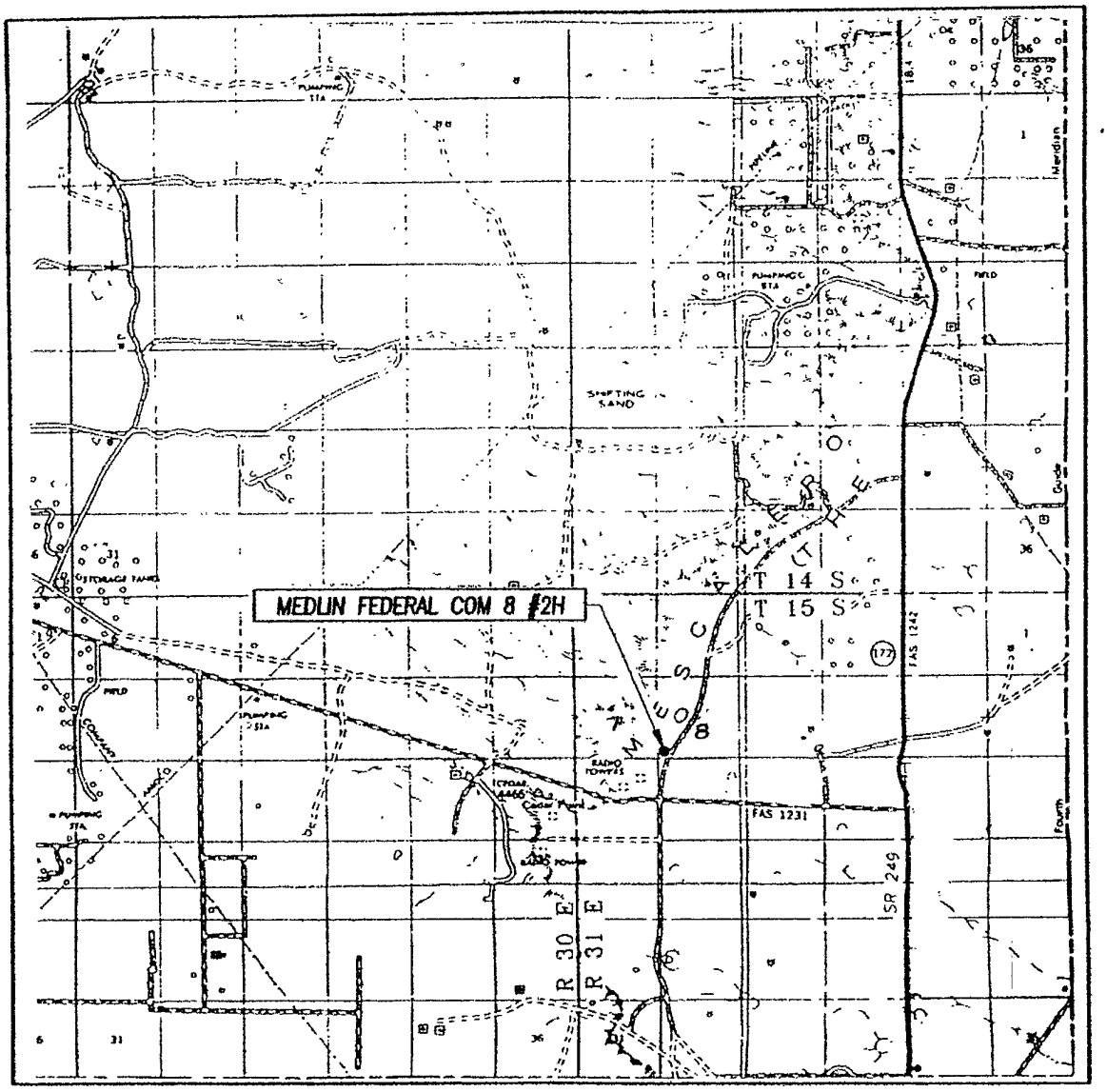
MARSHALL & WINSTON, INC.

CENTERLINE SURVEY OF AN ACCESS ROAD IN SECTION 8, TOWNSHIP 15 SOUTH, RANGE 31 EAST, N.M.P.M., CHAVES COUNTY, NEW MEXICO

Survey Date: 11/21/08	Sheet 1 of 1 Sheets
W.O. Number: 08.11.1927	Drawn By: LA
Date: 12/18/08	08111927_ROADS

EXHIBIT B-5

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 8 TWP. 15-S RGE. 31-E

SURVEY N.M.P.M.

COUNTY CHAVES STATE NEW MEXICO

DESCRIPTION 660' FSL & 330' FWL

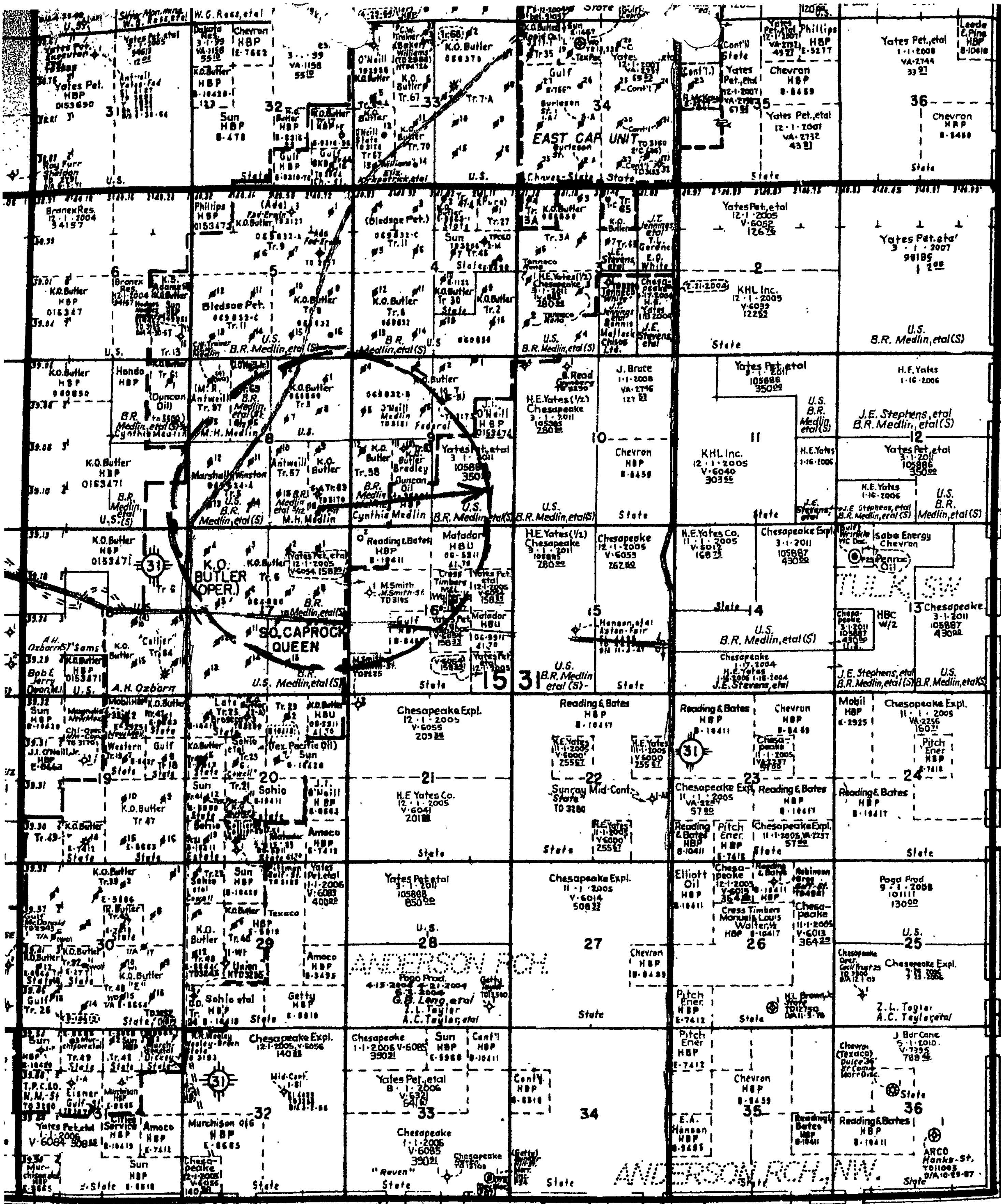
ELEVATION 4444'

OPERATOR MARSHALL & WINSTON, INC.

LEASE MEDLIN FEDERAL COM 8

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

EXHIBIT C



R 31 E

EDDY. East | LEA, Southwest

Ownership

...and Fee Information

EXHIBIT D

Southeast

DRILLING PROGNOSIS
MARSHALL & WINSTON, INC.
MEDLIN FEDERAL COM 8-2H
CHAVES COUNTY, NEW MEXICO

LOCATION:
SH: 660' FSL & 330' FWL, Sec. 8, T-15-S, R-31-E, Chaves County, New Mexico.
BH: 660' FSL & 330' FEL, Sec. 8, T-15-S, R-31-E, Chaves County, New Mexico.

ELEVATION: 4444' GL

GEOLOGIC NAME OF SURFACE FORMATION: Quaternary Alluvium Deposits

PROPOSED TD: 8700' Lower Abo

SURFACE OWNER: Bill Medlin

BLM LEASE NO.:

API NUMBER:

DRILLING CONTRACTOR: Patriot Drilling.

DIRT CONTRACTOR:

CEMENTING SERVICES: BJ Services, Artesia 505-746-3140

DRILLING MUD:

CASING:

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

OPENHOLE LOGS:

WELLHEAD EQUIPMENT: Downing Wellhead, Inc. 432-687-0778 George Yeilding

WATER HAULER:

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

FLOAT EQUIPMENT: Weatherford – Artesia 505-746-8882 Dennis Potter

Marshall and Winston Inc.
Medlin Federal Com 8 # 2H

DRILLING PROGRAM

1. The **Geological Surface Formation** is recent Permian with Quaternary Alluvium and other surficial deposits.

2. **Estimated Tops of Geological Markers:**

FORMATION	DEPTH
Quaternary alluvials	Surface
Rustler	?
Yates	2312'
Queen	3090'
San Andres	3940'
Abo Shale	7340'
Lower Abo Dolomite	8585'
WolfcampLS	8675'

Estimated depths at which water, oil, gas, or other mineral-bearing formations are expected to be encountered:

SUBSTANCE	DEPTH
Oil	Lower Abo 8700
Fresh Water	None anticipated

All fresh water and prospectively valuable minerals (as described by BLM) encountered during drilling will be recorded by depth and adequately protected.

3. **Proposed Casing Program:**

Casing condition is new pipe and the Safety Factor parameters in accordance with Onshore Orders are: Collapse =1.125 psi, Burst = 1.0 psi, Tension = 1.8 psi.

O.D., In	Depth, MD	Weight, Lb/ft	Grade	Conn.	Collapse Psi SF= 1.125	Burst Psi SF = 1.0	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

4. **Proposed Cementing Program**

WELL DATA

ANNULAR GEOMETRY

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

SUSPENDED PIPES

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

Float Collar set @	300 ft
Mud Density	8.50 ppg
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

FLUID SPECIFICATIONS

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

WELL DATA

ANNULAR GEOMETRY

ANNULAR I.D. (in)	DEPTH(ft)	
	MEASURED	TRUE VERTICAL
12.715 CASING	400	400
12.250 HOLE	3,950	3,950

SUSPENDED PIPES

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

Float Collar set @	3,910 ft
Mud Density	8.50 ppg
Est. Static Temp.	106 ° F
Est. Circ. Temp.	98 ° F

VOLUME CALCULATIONS

400 ft	x	0.3765 cf/ft	with	0 % excess	=	150.6 cf
2,750 ft	x	0.3132 cf/ft	with	100 % excess	=	1722.5 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	=	2266.6 cf
					=	404 bbls

FLUID SPECIFICATIONS

FLUID	VOLUME CU-FT	VOLUME FACTOR	AMOUNT AND TYPE OF CEMENT
Lead Slurry	1873	/ 2.4	= 765 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	= 300 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

WELL DATA

ANNULAR GEOMETRY

ANNULAR I.D. (in)	DEPTH(ft)	
	MEASURED	TRUE VERTICAL
9.001 CASING	3,950	3,950
8.750 HOLE	8,974	8,700

SUSPENDED PIPES

DIAMETER (in)		WEIGHT	DEPTH(ft)	
O.D.	I.D.	(lbs/ft)	MEASURED	TRUE VERTICAL
7.000	6.094	32	8,974	8,700

Float Collar set @	8,934 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
1,474 ft	x	0.1503 cf/ft	with	50% excess	=	332.4 cf
40 ft	x	0.2026 cf/ft	with	0% excess	=	8.1 cf (inside pipe)
				TOTAL SLURRY VOLUME	=	1228.3 cf
					=	219 bbls

FLUID SPECIFICATIONS

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	340	/ 1.1	= 290 sacks Premium Plus H Cement + 1% bwoc FL-62 + 0.4% bwoc FL-52A + 45.8% Fresh Water
Displacement			322.3 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	8,974	8,700
6.125 HOLE	13,125	8,700

SUSPENDED PIPES

DIAMETER (in)		WEIGHT	DEPTH(ft)	
O.D.	I.D.	(lbs/ft)	MEASURED	TRUE VERTICAL
4.500	4.000	11.6	13,125	8,700

FLUID	VOLUME CU-FT	VOLUME FACTOR	AMOUNT AND TYPE OF CEMENT
Cement Slurry	898	/ 1.	= 695 sacks (50:50) Poz (Fly Ash):Class H Cement + 0.005 lbs/sack Static Free + 5% bwow Sodium Chloride + 0.1% bwoc R-3 + 0.2% bwoc CD-32 + 0.005 gps FP-6L + 2% bwoc Bentonite + 0.3% bwoc FL-52A + 58.4% Fresh Water
Displacement			203.4 bbls Displacement

CEMENT PROPERTIES

	SLURRY NO. 1
Slurry Weight (ppg)	14.20
Slurry Yield (cf/sack)	1.30
Amount of Mix Water (gps)	5.88
Amount of Mix Fluid (gps)	5.89

5. **Proposed Pressure Control Equipment**

Will install on the 13 3/8" surface casing, a 3000 psi rated casing head and BOPE. Prior to drilling out of the 13 3/8" shoe, we will test the casing head to 2,000 psi and test the BOP to 2,000 psi. using a third party tester. Prior to drilling beyond the 9 5/8" shoe the BOPE shall be tested to 3,000 psi by a third party tester as per the Onshore Orders.

The mud system shall be a Closed Loop System. An 'NMOCD C -144 Form' has been submitted to the NMOCD for approval.

7. **Auxiliary Equipment:**
None

6 **Proposed Drilling Fluid Program :**

Depth	Medium Type	Estimated Weight
0 – 340'	Fresh H2O Mud	8.4 – 8.6 ppg
340'–3950'	Brine Water	10.0–10.1ppg
3950' – 8974'	Fresh Water & Brine	8.6 – 9.5 ppg
8974' – 13125'	2% KCL	8.4- 8.9 ppg

8. **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

9. **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.

10 **Anticipating Starting Date:**
March 1st, 2009 or when a rig becomes available.

Marshall & Winston, INC

Location: Chaves County, NM
Field: (Medlin) Sec 8, T15S, R31E
Facility: Medlin Fed Com 8 No. 2H

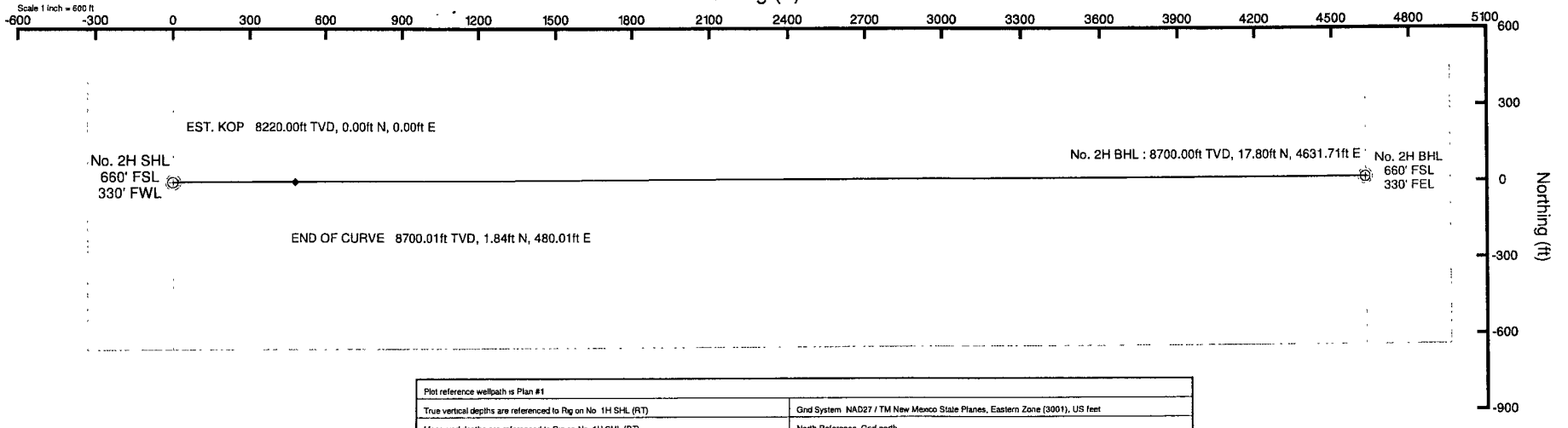
Slot: No. 2H SHL
Well: No. 2H
Wellbore: No. 2H PWB

Marshall & Winston, Inc.

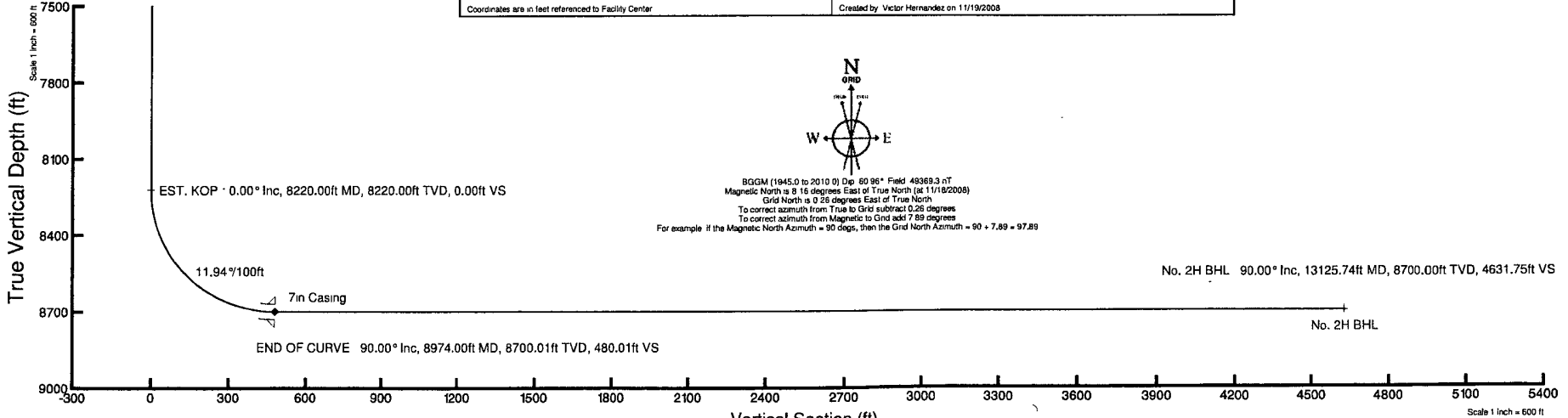
BAKER HUGHES INTEQ

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	89.780	0.00	0.00	0.00	0.00	0.00
EST. KOP	8220.00	0.000	89.780	8220.00	0.00	0.00	0.00	0.00
END OF CURVE	8974.00	90.000	89.780	8700.01	1.84	480.01	11.94	480.01
No. 2H BHL	13125.74	90.000	89.780	8700.00	17.80	4631.71	0.00	4631.75



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: 4462 feet	Scale: True distance
Mean Sea Level to Mud line (Facility: Medlin Fed Com 8 No 2H): -4444 feet	Depths are in feet
Coordinates are in feet referenced to Facility Center	Created by: Victor Hernandez on 11/19/2008



BGGM (1945.0 to 2010.0) Dip: 60.96° Field: 49369.3 nT
Magnetic North is 8.15 degrees East of True North (at 11/18/2008)
Grid North is 0.26 degrees East of True North
To correct azimuth from True to Grid subtract 0.26 degrees
To correct azimuth from Magnetic to Grid add 7.89 degrees
For example: if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.89 = 97.89

Marshall & Winston, Inc.

Planned Wellpath Report

Plan #1

BAKER HUGHES INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Marshall & Winston, INC**	Slot	**No. 2H SHL**
Area	**Chaves County, NM**	Well	**No. 2H**
Field	**(Medlin) Sec 8, T15S, R31E**	Wellbore	**No. 2H PWB**
Facility	**Medlin Fed Com 8 No. 2H**		

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	**0.999934**	Report Generated	**11/19/2008** at **10:01:37 AM**
Convergence at slot	**0.26° East**	Database/Source file	**WA_Midland/No._2H_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**	647804.30	736889.60	33°01'29.430"N	103°51'03.956"W
Facility Reference Pt			**647804.30**	**736889.60**	33°01'29.430"N	103°51'03.956"W
Field Reference Pt			**647804.30**	**736889.60**	33°01'29.430"N	103°51'03.956"W

WELLPATH DATUM			
Calculation method	**Minimum curvature**	Rig on No. 1H SHL (RT) to Facility Vertical Datum	**18.00ft**
Horizontal Reference Pt	**Facility Center**	Rig on No. 1H SHL (RT) to Mean Sea Level	**4462.00ft**
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	**89.78°**

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Marshall & Winston, INC**	Slot	**No. 2H SHL**
Area	**Chaves County, NM**	Well	**No. 2H**
Field	**(Medlin) Sec 8, T15S, R31E**	Wellbore	**No. 2H PWB**
Facility	**Medlin Fed Com 8 No. 2H**		

WELLPATH DATA (53 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]	DLS [°/100ft]	Comments
0.00	0.000	89.780	0.00	0.00	0.00	0.00	647804.30	736889.60	0.00	Tie On
8220.00	0.000	89.780	8220.00	0.00	0.00	0.00	647804.30	736889.60	0.00	EST. KOP
8320.00†	11.936	89.780	8319.28	10.38	0.04	10.38	647814.68	736889.64	11.94	
8420.00†	23.873	89.780	8414.26	41.07	0.16	41.07	647845.36	736889.76	11.94	
8520.00†	35.809	89.780	8500.85	90.74	0.35	90.73	647895.03	736889.95	11.94	
8620.00†	47.745	89.780	8575.29	157.24	0.60	157.24	647961.53	736890.20	11.94	
8720.00†	59.682	89.780	8634.36	237.70	0.91	237.70	648041.98	736890.51	11.94	
8820.00†	71.618	89.780	8675.52	328.64	1.26	328.64	648132.91	736890.86	11.94	
8920.00†	83.554	89.780	8696.98	426.12	1.64	426.12	648230.39	736891.24	11.94	
8974.00	90.000	89.780	8700.01	480.01	1.84	480.01	648284.28	736891.44	11.94	END OF CURVE
9020.00†	90.000	89.780	8700.01	526.01	2.02	526.01	648330.27	736891.62	0.00	
9120.00†	90.000	89.780	8700.01	626.01	2.41	626.01	648430.26	736892.01	0.00	
9220.00†	90.000	89.780	8700.01	726.01	2.79	726.01	648530.26	736892.39	0.00	
9320.00†	90.000	89.780	8700.01	826.01	3.17	826.00	648630.25	736892.77	0.00	
9420.00†	90.000	89.780	8700.01	926.01	3.56	926.00	648730.24	736893.16	0.00	
9520.00†	90.000	89.780	8700.01	1026.01	3.94	1026.00	648830.23	736893.54	0.00	
9620.00†	90.000	89.780	8700.01	1126.01	4.33	1126.00	648930.23	736893.93	0.00	
9720.00†	90.000	89.780	8700.01	1226.01	4.71	1226.00	649030.22	736894.31	0.00	
9820.00†	90.000	89.780	8700.01	1326.01	5.10	1326.00	649130.21	736894.70	0.00	
9920.00†	90.000	89.780	8700.01	1426.01	5.48	1426.00	649230.20	736895.08	0.00	
10020.00†	90.000	89.780	8700.01	1526.01	5.86	1526.00	649330.20	736895.46	0.00	
10120.00†	90.000	89.780	8700.01	1626.01	6.25	1626.00	649430.19	736895.85	0.00	
10220.00†	90.000	89.780	8700.01	1726.01	6.63	1726.00	649530.18	736896.23	0.00	
10320.00†	90.000	89.780	8700.01	1826.01	7.02	1826.00	649630.17	736896.62	0.00	
10420.00†	90.000	89.780	8700.01	1926.01	7.40	1926.00	649730.17	736897.00	0.00	
10520.00†	90.000	89.780	8700.01	2026.01	7.79	2026.00	649830.16	736897.39	0.00	
10620.00†	90.000	89.780	8700.01	2126.01	8.17	2125.99	649930.15	736897.77	0.00	
10720.00†	90.000	89.780	8700.01	2226.01	8.56	2225.99	650030.14	736898.15	0.00	
10820.00†	90.000	89.780	8700.01	2326.01	8.94	2325.99	650130.14	736898.54	0.00	
10920.00†	90.000	89.780	8700.01	2426.01	9.32	2425.99	650230.13	736898.92	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Marshall & Winston, INC**	Slot	**No. 2H SHL**
Area	**Chaves County, NM**	Well	**No. 2H**
Field	**(Medlin) Sec 8, T15S, R31E**	Wellbore	**No. 2H PWB**
Facility	**Medlin Fed Com 8 No. 2H**		

WELLPATH DATA (53 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]	DLS [°/100ft]	Comments
11020.00†	90.000	89.780	8700.01	2526.01	9.71	2525.99	650330.12	736899.31	0.00	
11120.00†	90.000	89.780	8700.01	2626.01	10.09	2625.99	650430.11	736899.69	0.00	
11220.00†	90.000	89.780	8700.01	2726.01	10.48	2725.99	650530.11	736900.08	0.00	
11320.00†	90.000	89.780	8700.01	2826.01	10.86	2825.99	650630.10	736900.46	0.00	
11420.00†	90.000	89.780	8700.01	2926.01	11.25	2925.99	650730.09	736900.84	0.00	
11520.00†	90.000	89.780	8700.00	3026.01	11.63	3025.99	650830.08	736901.23	0.00	
11620.00†	90.000	89.780	8700.00	3126.01	12.01	3125.99	650930.08	736901.61	0.00	
11720.00†	90.000	89.780	8700.00	3226.01	12.40	3225.99	651030.07	736902.00	0.00	
11820.00†	90.000	89.780	8700.00	3326.01	12.78	3325.99	651130.06	736902.38	0.00	
11920.00†	90.000	89.780	8700.00	3426.01	13.17	3425.99	651230.05	736902.77	0.00	
12020.00†	90.000	89.780	8700.00	3526.01	13.55	3525.98	651330.05	736903.15	0.00	
12120.00†	90.000	89.780	8700.00	3626.01	13.94	3625.98	651430.04	736903.53	0.00	
12220.00†	90.000	89.780	8700.00	3726.01	14.32	3725.98	651530.03	736903.92	0.00	
12320.00†	90.000	89.780	8700.00	3826.01	14.70	3825.98	651630.02	736904.30	0.00	
12420.00†	90.000	89.780	8700.00	3926.01	15.09	3925.98	651730.01	736904.69	0.00	
12520.00†	90.000	89.780	8700.00	4026.01	15.47	4025.98	651830.01	736905.07	0.00	
12620.00†	90.000	89.780	8700.00	4126.01	15.86	4125.98	651930.00	736905.46	0.00	
12720.00†	90.000	89.780	8700.00	4226.01	16.24	4225.98	652029.99	736905.84	0.00	
12820.00†	90.000	89.780	8700.00	4326.01	16.63	4325.98	652129.98	736906.23	0.00	
12920.00†	90.000	89.780	8700.00	4426.01	17.01	4425.98	652229.98	736906.61	0.00	
13020.00†	90.000	89.780	8700.00	4526.01	17.39	4525.98	652329.97	736906.99	0.00	
13120.00†	90.000	89.780	8700.00	4626.01	17.78	4625.98	652429.96	736907.38	0.00	
13125.74	90.000	89.780	8700.00[1]	4631.75	17.80	4631.71	652435.70	736907.40	0.00	No. 2H BHL

Planned Wellpath Report

Plan #1

Marshall & Winston, Inc.

BAKER HUGHES INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Marshall & Winston, INC**	Slot	**No. 2H SHL**
Area	**Chaves County, NM**	Well	**No. 2H**
Field	**(Medlin) Sec 8, T15S, R31E**	Wellbore	**No. 2H PWB**
Facility	**Medlin Fed Com 8 No. 2H**		

HOLE & CASING SECTIONS Ref Wellbore: No. 2H 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]
17.5in Open Hole	0.00	250.00	250.00	0.00	250.00	0.00	0.00	0.00	0.00
13.375in Conductor	0.00	250.00	250.00	0.00	250.00	0.00	0.00	0.00	0.00
12.25in Open Hole	250.00	3950.00	3700.00	250.00	3950.00	0.00	0.00	0.00	0.00
9.625in Casing	250.00	3950.00	3700.00	250.00	3950.00	0.00	0.00	0.00	0.00
8.75in Open Hole	3950.00	8974.00	5024.00	3950.00	8700.01	0.00	0.00	1.84	480.01
7in Casing	3950.00	8974.00	5024.00	3950.00	8700.01	0.00	0.00	1.84	480.01
6.125in Open Hole	8974.00	13125.74	4151.74	8700.01	NA	1.84	480.01	NA	NA

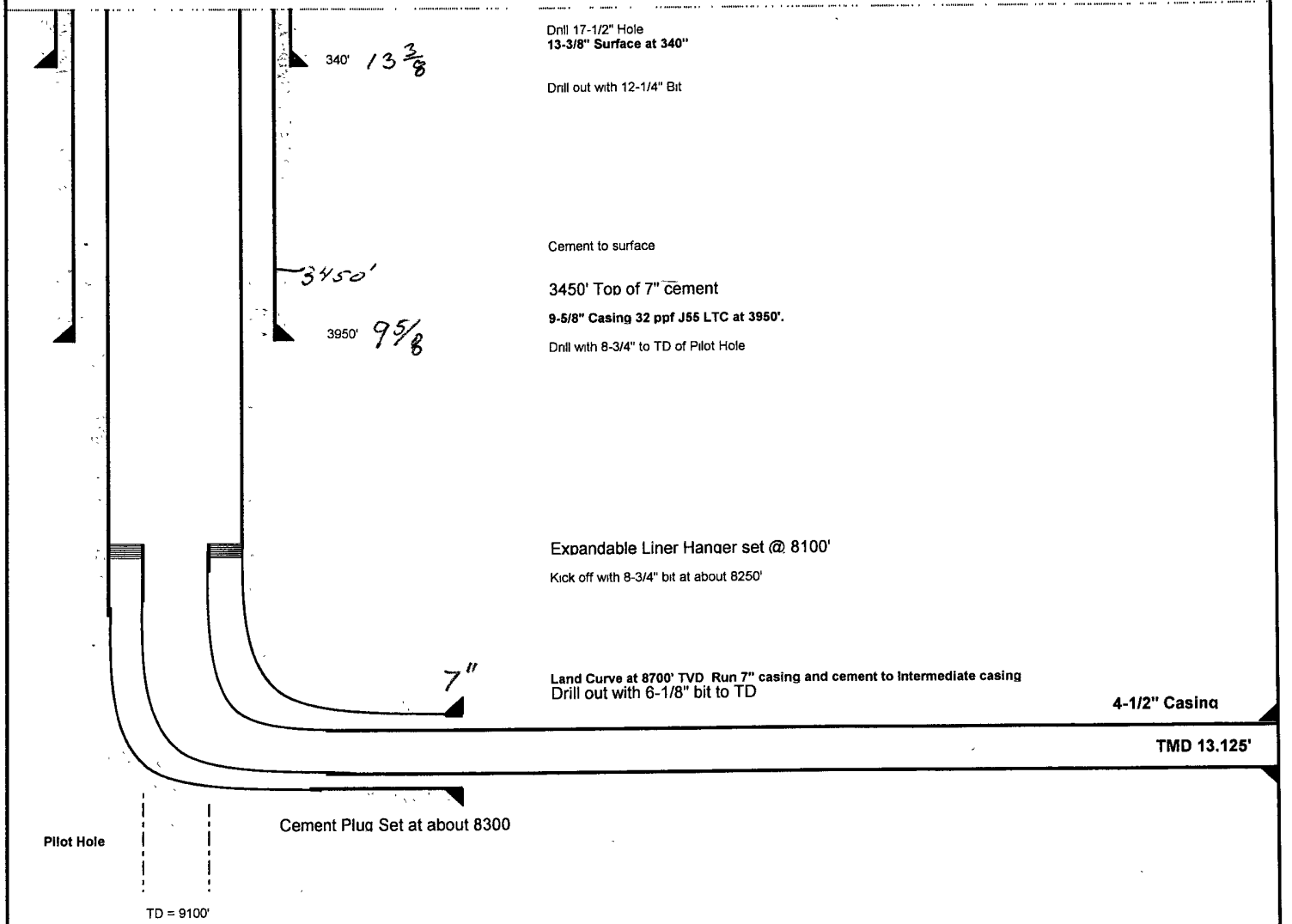
TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) No. 2H BHL	13125.74	8700.00	17.80	4631.71	**652435.70**	**736907.40**	33°01'29.393"N	103°50'09.558"W	poi

SURVEY PROGRAM Ref Wellbore: No. 2H PWB Ref Wellpath: Plan #1

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
18.00	13125.74	NaviTrak (Standard)		No. 2H PWB

AFE No.	M&WA Marshall & Winston, Inc.	AFE Information
API #	**Medlin Federal Com 8-2H**	Dry Hole: Days:
Permit No.	Chavez County, NM	Proposed TD: 13250' TMD 8700' TVD
Project No.	Proposed Wellbore Sketch	v



Drill 17-1/2" Hole
13-3/8" Surface at 340"

Drill out with 12-1/4" Bit

Cement to surface

3450' Top of 7" cement

9-5/8" Casing 32 ppf J55 LTC at 3950'.

Drill with 8-3/4" to TD of Pilot Hole

Expandable Liner Hanger set @ 8100'

Kick off with 8-3/4" bit at about 8250'

Land Curve at 8700' TVD Run 7" casing and cement to intermediate casing
Drill out with 6-1/8" bit to TD

4-1/2" Casing

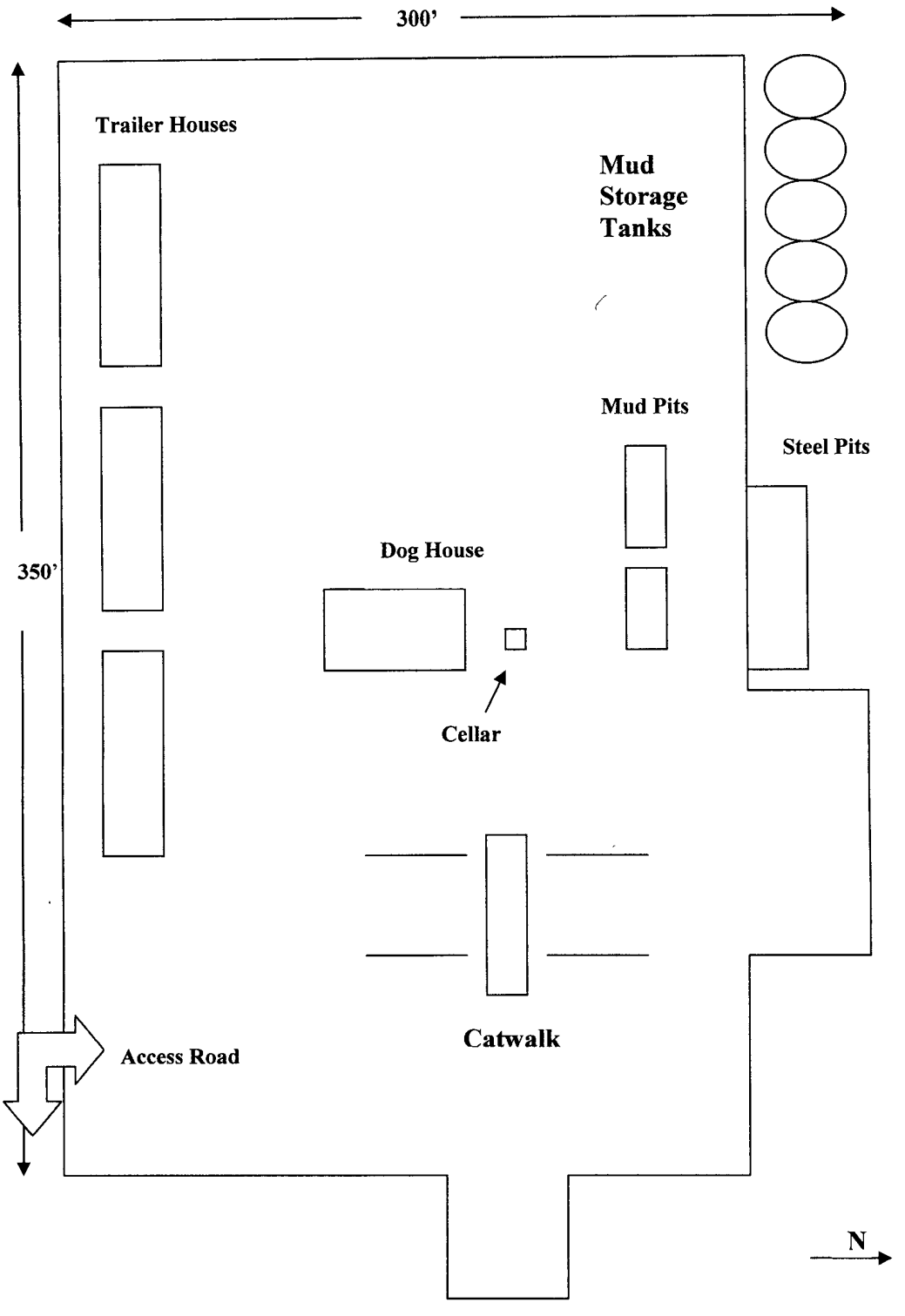
TMD 13.125'

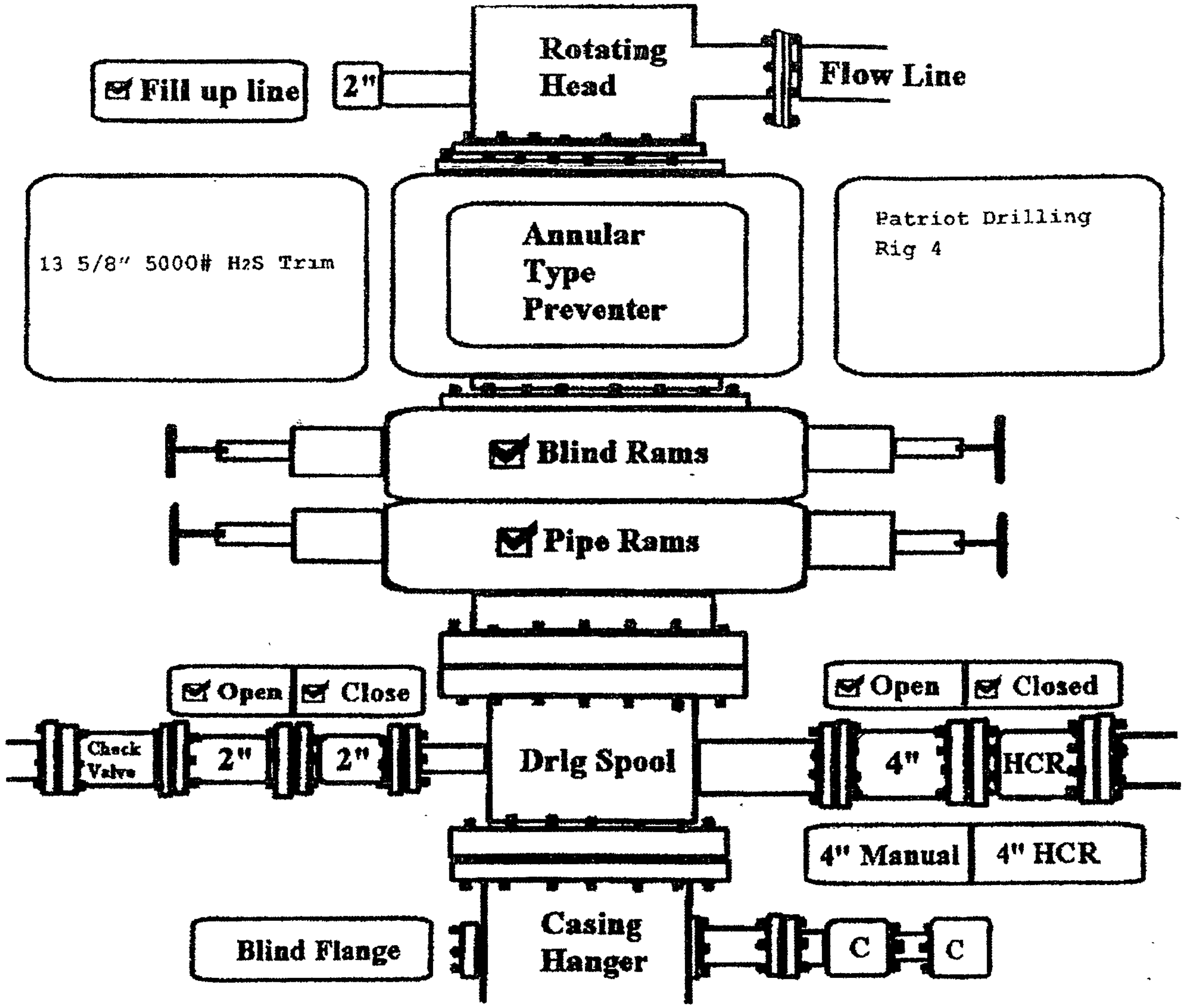
Cement Plug Set at about 8300

Well Information

Surface Location Chavez County, T15S R31E Section 8

RIG PLAT


300'
Trailer Houses
Mud
Storage
Tanks
Mud Pits
Steel Pits
350'
Dog House
Cellar
Catwalk
Access Road
N



CONTACTING AUTHORITIES FOR EMERGENCY SITUATIONS

H2S Contingency Plan
Medlin Fed Com 08 # 2H
Marshall and Winston Inc.
Sec 08, T. 15 S., R. 31 E.,

Agencies will ask for information about the release such as: Type, Volume, Wind Direction, Location, etc. Be prepared with all information available. This response plan must be in coordination with the State of New Mexico's "Hazardous Materials Emergency Response Plan" (HMER).

Ambulance	Ambulance	911
Marshall and Winston	Otis Holt (Well Site Supervisor)	(325) 206-1528 (c)
Marshall and Winston	Gabe Herrera (Engineer)	(432) 684-6373 (o)
"	"	(432) 260-8650 (c)
Marshall and Winston	Tom Brandt (Operations)	(432) 684-6373 (o)
"	"	(432) 553 -9747 (c)
Marshall and Winston	George Watters	(432) 684-6373 (o)
"	"	(432) 631-2051 (c)

Artesia

Ambulance	911
State Police	(575) 746-2703
City Police	(575) 746-2703
Sheriff's Office	(575) 746-9888
Fire Department	(575) 746-2701
Local Emergency Planning Committee	(575) 746-2122
New Mexico Oil Conservation Division	(575) 748-1283

Santa Fe

N.M. Emergency Response Commission (Santa Fe) 24 hrs	(505) 476-9600
NM State Emergency Operations Center	(505) 476 9635

National

National Energy Response Center (Washington)	(800) 424-8802

Medical

Flight for Life 4000 24th St. Lubbock, TX	(806) 743-9911
Aero care –R3, Box 49F, Lubbock, TX	(806) 747-8923
Med Flight Air Amb, 2301 Yale Blvd S.E. Alb,, NM	(505) 842-4433
SB Air Med Service, 2505 Clark Loop S.E., Alb., NM	(505) 843-4949

Other

Boots and Coots Wildcat Service	(800) 256-9688
Cudd Pressure Control	(432) 699-0139
Halliburton	(575) 746-2757
B.J. Services	(575) 746 3569

SURFACE USE PLAN
Marshall & Winston Incorporated
Medlin Federal Com 8 # 2 H
Section 08, T. 15 S., R. 31 E

1. **Existing Roads:**

Exhibit 'A' shows the proposed well site as staked. NMOCD C-102
Exhibit 'B' is a reproduction of Eddy County, New Mexico, General Highway map. Directions to location are given: From the intersection of State Highway 249 and State Highway 172 (route from Hagerman to Maljamar), go West on State Road 249 approximately 3.0 miles, turn right and go North approximately 0.6 miles, turn left at proposed road survey and go Northwest approximately 212 feet.
Exhibit 'C' is a reproduction of a USGS topographic Map, showing existing roads and proposed roads. All existing roads will be maintained in a condition to or better than the current conditions. Any new roads will be constructed to BLM specifications.

2.**Planned Access Roads:** 212' of proposed road up from an existing road on the private surface to the drilling pad. A BLM ROW is required for 2565 feet from State Highway 249 to the private surface land. See Exhibit B1 – B5.

3.**Locations of Existing Wells in a One-mile radius – Exhibit 'E'**

1. Water Wells – None known
2. Disposal wells – None known
3. Drilling wells – None known
4. Producing wells- As shown on Exhibit 'E'
5. Abandoned wells – As shown on Exhibit 'E'

4. **If a completion on this well is a producer**, _Marshall and Winston Inc. will furnish maps and / or plats showing on site facilities or off site facilities if needed. This will be accompanied by a Sundry Notice. See **Exhibit `F'**.

5. **Location and Type of Water Supply:**
Water will be purchased from the rancher's wells trucked over the access roads.

6. **Source of Construction Material:**
If possible, construction will be obtained from the Medlin Ranch. If additional material is needed, it will be purchased from a local source. Material will be transported over the access route as shown on **Exhibit `C'**.

7. **Methods of Handling Waste Material:**

A. Drill cuttings will be separated by a series of solids removal equipment and stored in steel containment pits and then hauled to a state- approved disposal facility.

B. All trash, junk and other waste material will be contained in trash cages or bins to prevent scattering. When the job is completed all contents will be removed and disposed of in an approved sanitary land fill.

C. Salts remaining after completion of well will be picked up by supplier including broken sacks.

D. Sewage from any living quarters will drain into holding tanks and be cleaned out periodically. A Porta-John will be provided for the rig crews. This equipment will be properly maintained during the drilling operations and removed upon completion of the well.

E. Drilling fluids will be contained in the steel pits in a closed circulating system. Fluids will be cleaned and reused Water produced during testing will be contained in the steel pits and disposed of at a state approved disposal facility. Any oil or condensate produced will be stored in test tanks until sold and hauled from the site.

8. **Ancillary Facilities:**

A. No camps or airstrips to be constructed.

9. Well Site Layout:

A. Exhibit 'G' shows location and rig layout.

B. Mud pits in the closed circulating system will be steel pits and the cuttings will be stored in steel containment pits.

C. Cuttings will be stored in steel pits until they are hauled to a state-approved disposal facility

D. If the well is a producer, those areas of the location not essential top production facilities will be reclaimed and seeded per BLM requirements.

(con't)

10. Plans for Restoration of Surface:

Rehabilitation of the location will start in a timely manner after all drilling operations cease. The type of reclamation will depend on whether the well is a producer or a dry hole.

Drainage systems, if any, will be reshaped to the original configuration with provisions made to alleviate erosion. These may need to be notified in certain circumstances to prevent inundation of the location's pad and surface facilities. After the area has been shaped and contoured, topsoil form the spoil pile will be loaced overt the disturbed area to the extent possible. Re-vegetation. Procedures will comply with BLM standards.

If the well is a dry hole, the pad and road area will be re-contoured to match the existing terrain. Topsoil will be spread to the extent possible. Re-vegetation will comply with BLMM standards.

Should the well be a producer, the previously noted procedures will apply to those areas which are not required form production facilities.

11. **Other Information:**

A. Topography consists of a sloping plane with loose tan sands. Vegetation is mainly Yucca, Mesquite and Shin Oak.

B. The well site is on the surface owned by Medlin Ranch. The land is used mainly for cattle ranching, and oil and gas production.

C. An Archaeological survey will be conducted on the location and proposed roads, and this report will be filed with the Bureau of Land Management in the Carlsbad BLM office.

D. There is a Medlin Ranch house within 1 ½ miles of this location.

12. Surface and Mineral Ownership: Separate page for Private Surface.

PRIVATE SURFACE OWNER AGREEMENT
BLM, Carlsbad Field Office

OPERATOR: Marshall and Winston Inc

WELL NAME: Medlin Federal Com 8 # 2H

FOOTAGE LOCATION: 330 Ft. FWL, 660 Ft. FSL

SECTION: 08, TOWNSHIP: 15 S RANGE: 31 E

COUNTY: Chaves , STATE: NM

LEASE NUMBER: NMLC 062524 A

STATEMENT OF SURFACE USE

The surface to the subject land is owned by : Bill Medlin etux.
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 negotiated.

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: Vernon D. Dyer

DATE: December, 24th 2008

TITLE: Agent

To expedite your Application to Drill please fax the completed form to the
Bureau of Land Management (505) 234-5927 or (505) 885-9264
Attention: Legal Instruments Examiner
620 E. Green Street
Carlsbad, NM 88220

The original document with signature should be mailed as soon as possible. Thank you for your cooperation.

TANK BATTERY PLAT

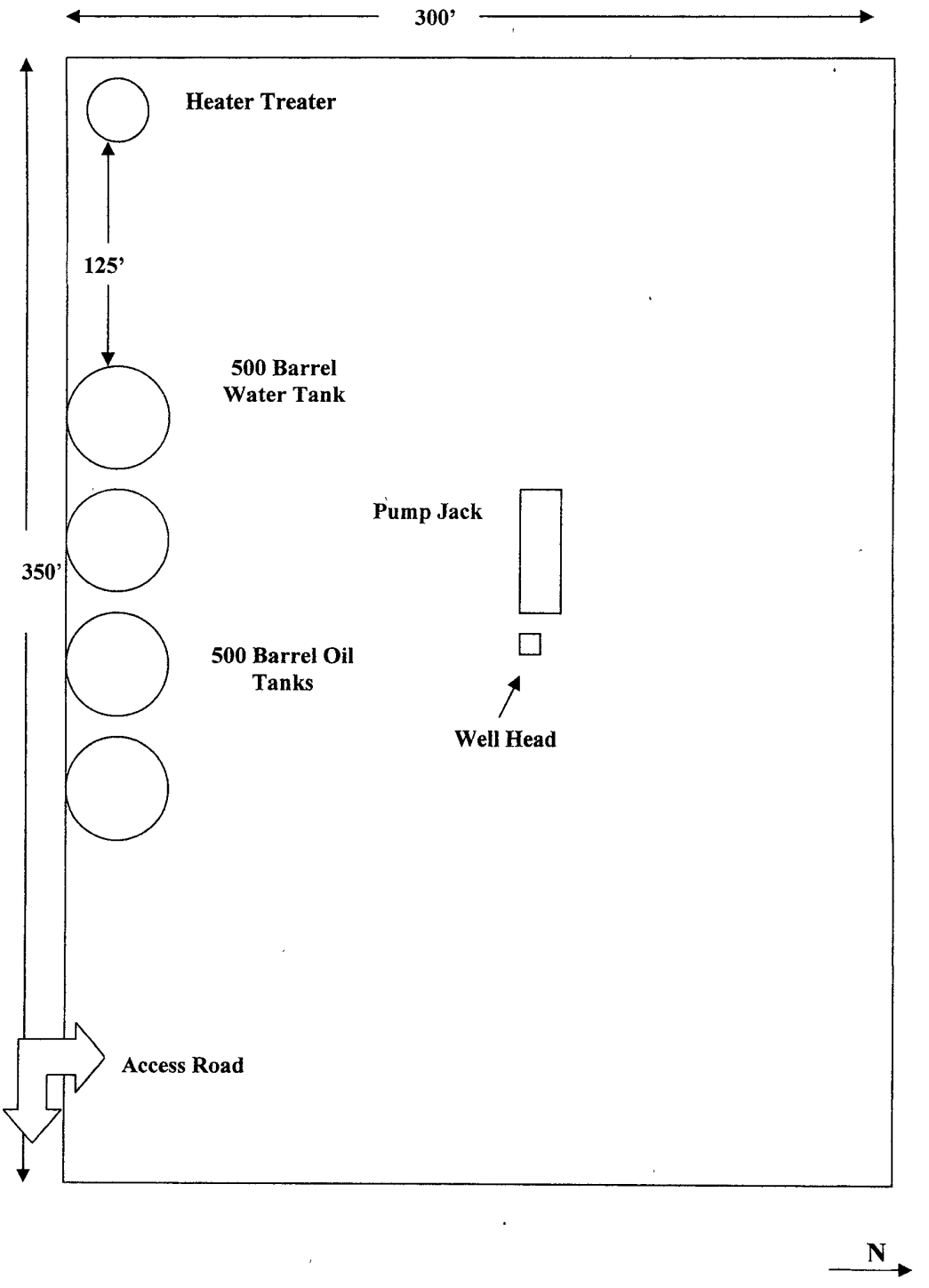


EXHIBIT E

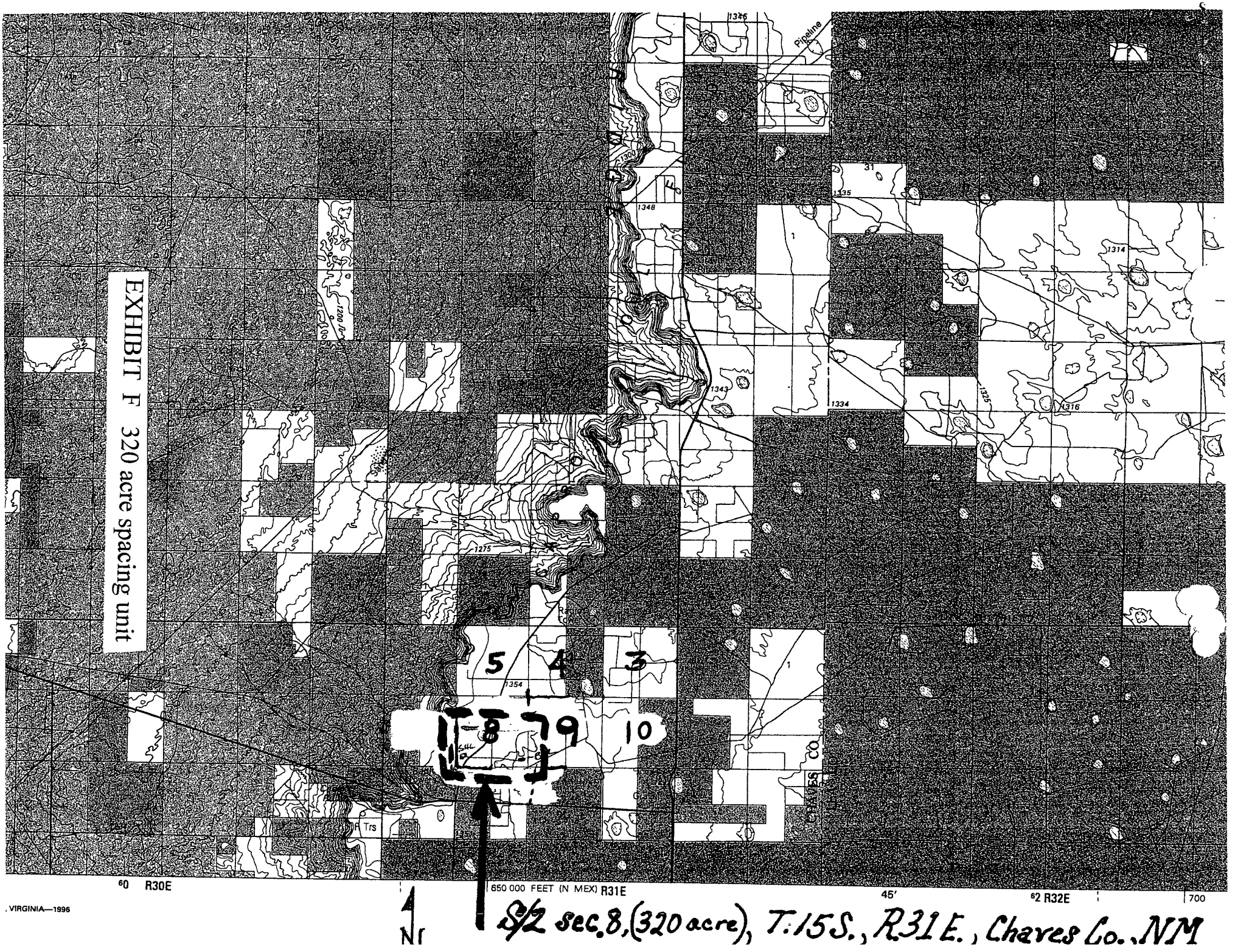
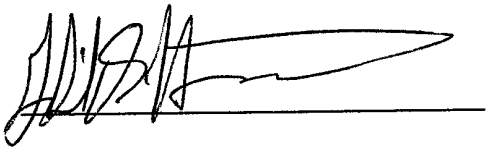


EXHIBIT F 320 acre spacing unit
Pipeline
5
4
3
8
9
10
60 R30E
650 000 FEET (N MEX) R31E
45'
62 R32E
700
VIRGINIA—1996
S/2 sec. 8, (320 acre), T. 15S., R31E., Chaves Co., NM

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 23 day of December, 2008



Name Gabriel Herrera
Address 6 Desta Drive Suite 3100 Midland, TX 79705
Telephone 432-684-6373
Field representative (if not above signatory)
Address (if different from above)
Telephone (if different from above)
E-mail gherrera@mar-win.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.

NOTICE OF STAKING

NOTICE OF STAKING **Not to be used in place of Application for Permit to Drill (Form 3160-3)**	**7. Unit Agreement Name**
1. Oil Well X **Gas Well** ___ **Other (Specify)** ___	**8. Well Name and Number** Medlin Federal #8-2H
2. Name Address, and Telephone of Operator. Marshall & Winston, Inc PO Box 50880 Midland, Tx. 79710	**9. American Petroleum Institute (API) Well Number (if available)** N/A
3. Name and Telephone of Specific Contact Person. Vernon D. Dyer 575-420-0355	**10. Field Name or Wildcat** Wildcat
4. Surface Location of Well Attach: **(a) Sketch showing road entry onto pad, pad dimensions, and reserve pit** **(b) Topographical or other acceptable map (e.g. a USGS 71/2" Quadrangle) showing location, access road, and lease boundaries**	**11. Section, Township, Range, Meridian; or Block and Survey; or Area** Section 8, T-15-S R-31-E
5. Lease Number LC 062524A	**12. County, Parish, or Borough** Chaves County
6. If Indian, Allottee or Tribe Name N/A	**13. State** New Mexico

14. Name and Depth of Formation Objective(s) Abo 7330'TVD	**15. Estimated Well Depth** Pilot Hole 9060'TVD Lateral 8800'TVD TD 13200' TMD	**16. For directional or horizontal Wells, anticipated bottom-hole location.** 330'FEL & 660' FSL

17. Additional information (as appropriate; include surface owner's name, address and, if known, telephone). Bill R. Medlin
PO Box 50
Maljamar, NM 88264

18. Signed Vernon D Dyer **Title** Agent **Date** 10-21-2008

Vernon D. Dyer Agent

Note: When the Bureau of Land Management receives this Notice, the agency will schedule the date of the onsite inspection. You must stake the location and flag the access road before the onsite inspection. Operators should consider the following before the onsite inspection and incorporate these considerations into the Notice of Staking Option, as appropriate:

(a) H_2S Potential;
(b) Cultural Resources (Archaeology); and
(c) Federal Right-of-Way or Special Use Permit.

PECOS DISTRICT - RFO
CONDITIONS OF APPROVAL

February 5, 2009

Applicant: Marshall and Winston Inc.
Lease No.: NMLC-062524A
Well Name: Medlin Federal Com 8 #2-H
Surface Hole: 660' FSL & 330' FWL,
Bottom Hole: 660' FSL & 330' FEL,
Location: Sec. 8, T15S-R37E,
Chaves County, New Mexico, NMPM.

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 on the side of the 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: **No reserve pit will be used.**

D. FEDERAL MINERAL MATERIALS PIT:

If the operator elects to surface the access road and/or well pad, payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Roswell Field Office at (505) 627-0236.

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 need.

F. ON LEASE ACCESS ROADS:

Road Egress and Ingress

The on lease access road shall be constructed to access the 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.

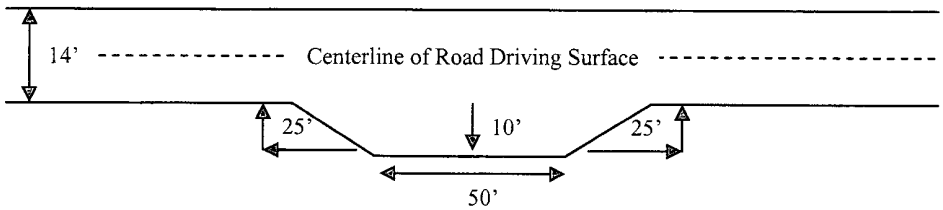
Crowning

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.

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

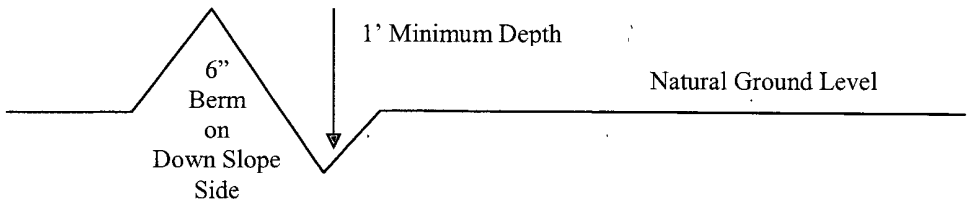


Drainage

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:

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

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

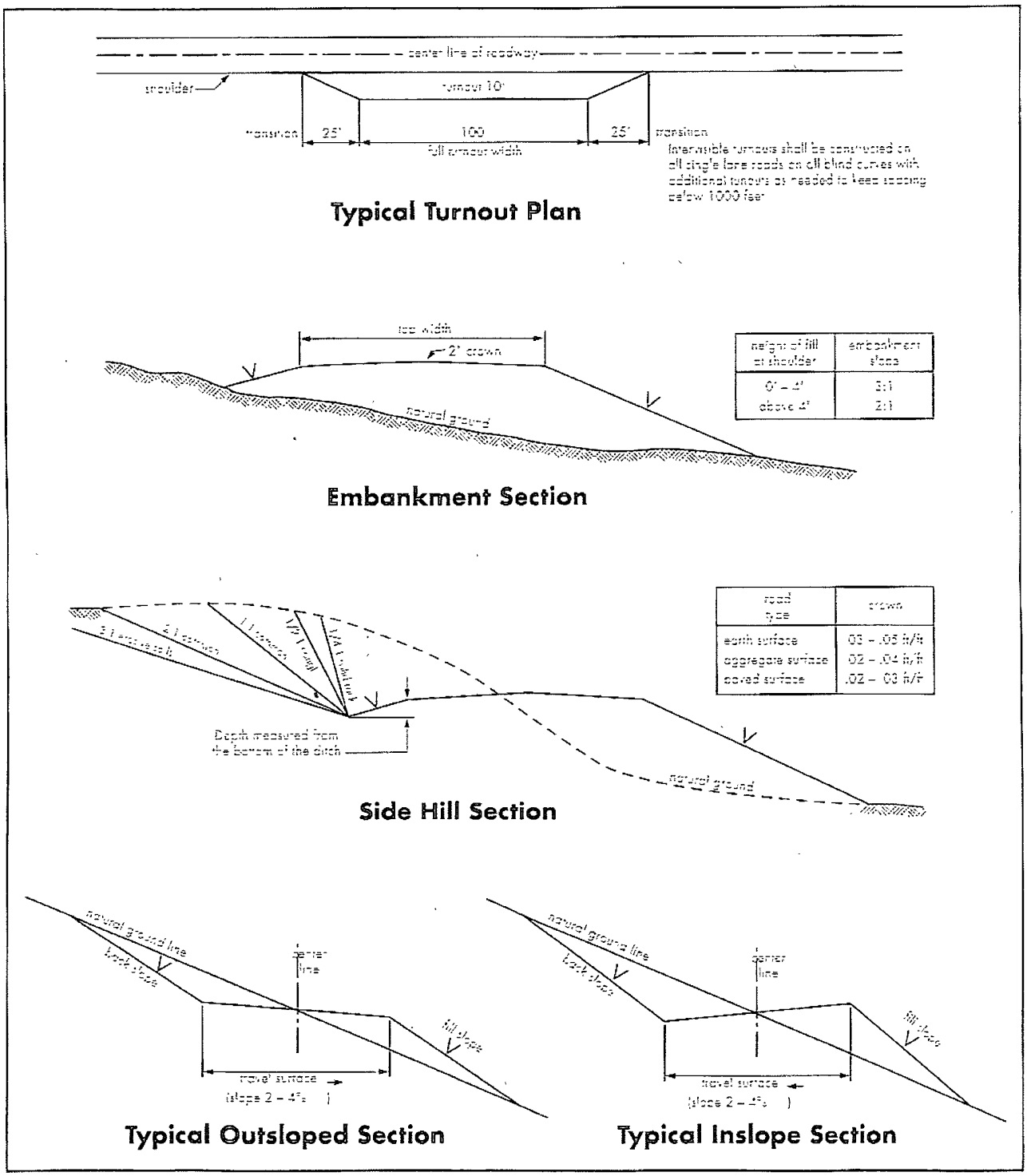
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

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

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. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.

6. 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

7. Air, air-mist or 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 8 5/8 inch usable water protection casing string(s) shall be set at approximately 340 feet 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 **9-5/8** 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 **7** 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. There is no required fill of cement behind the **4-1/2** inch production casing since a Peak Systems Iso-Pak liner will be used for lateral and will not require cementing.

5. 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. 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 **9-5/8** 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 **9-5/8** 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 **9-5/8** 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.

e. 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).

VRM Facility Requirement – VRM Class IV

Low-profile tanks not greater than eight-feet-high shall be used.

VII. INTERIM RECLAMATION

Earthwork for interim and final reclamation must be completed within 6 months of well completion or well plugging (weather permitting).

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.

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, BLM
SEED MIX FOR
Loamy, SD-3 Ecological Site
Loamy CP-2
Gyp Upland CP-2

Common Name and Preferred Variety	Scientific Name	Pounds of Pure Live Seed Per Acre
Blue grama,	(*Bouteloua gracilis)*	4.0
Sideoats grama,	(*Bouteloua curtipendula)*	1.0
Sand dropseed	(*Sporobolus cryptandrus)*	0.5
Vine mesquite	(*Panicum obtusum)*	1.0
Plains bristlegrass	(*Setaria macrostachya)*	1.0
Indian blanketflower	(*Gaillardia aristata)*	0.5
Desert or Scarlet Globemallow	(*Sphaeralcea ambigua*) or (*S. coccinea)*	1.0
Annual sunflower	(Helianthus annuus)	0.75
TOTAL POUNDS PURE LIVE SEED(pls) PER ACRE		9.75
Certified Weed Free Seed		

If one species is not available, increase ALL others proportionately.
Use No Less than 4 species, including one forb.
No less than 9.75 pounds pls per acre shall be applied

C. 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. 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).

c. 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.

General Location Map